CONCORDIA UNIVERSITY

SPECIAL AUDIT REPORT

ON SPECIFIC ACCOUNTS OF

THE FACULTY OF ENGINEERING

AND COMPUTER SCIENCE

JULY 1994

Prepared by

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BESSNER GALLAY SCHAPIRA KREISMAN CHARTERED ACCOUNTANTS • COMPTABLES AGRÉES

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The Mandate

"The purpose and objective of this audit, without limiting any specific areas for review, is to provide the University administration and management with a detailed and concise report covering the financial, accounting and administrative controls and procedures of the Research, Contract and Restricted accounts of the Faculty of Engineering & Computer Science. (the Faculty)

In particular, we shall verify that all policies and procedures of the University have been adhered to by the Faculty and, where applicable, recommend improvements to existing practices or suggest the implementation of new or modified controls.

Our audit will be all encompassing and as such may extend beyond both personnel and the accounting records as they may relate specifically to the accounts in question"(1)

The very nature of an audit which is intended to prove or disprove allegations of wrongdoing is such that it will constantly and sometimes dramatically change direction, scope and focus as events are uncovered.

A forensic auditor is not normally responsible for the initial detection of fraud; instead, the forensic auditor usually becomes involved after sufficient predication exists. Allegations of fraud are often based on insufficient evidence. During the course of our investigation, we received numerous allegations pertaining to several Faculty members, some of whom are not mentioned in this report. Our investigation ultimately proved the allegations to be false or we were unable to substantiate or refute the claims due to insufficient or non-existent evidence.

Further, some of the allegations involved improprieties with graduate students, none of whom would agree to meet or talk with us, fearing consequences which would impact negatively upon their academic and professional future.

The Faculty employed thousands of individuals in varying capacities during the 13 years under review and it is both impractical and unrealistic to attempt to interview more than a limited number in the time available. As such, it is possible — and it is our opinion based upon information obtained to date — that additional interviews and investigation would continue to uncover more irregularities, inconsistencies and abuses similar to those contained herein.

It is of utmost importance to recognize that a forensic auditor is neither a judge nor jury and as such will only obtain evidence or other documentation to establish a reasonable basis for any opinion required. However, no opinion shall be expressed regarding the guilt or innocence of any person or party. This determination will be the responsibility of the courts and the judicial system.

It is vital to the equity of all concerned that this report be read in its entirety since to remove parts out of context could be seriously misleading and possibly damaging when no impropriety exists. It is also of utmost importance to comprehend the parameters surrounding the University in global terms and Concordia in more specific terms.

A University is primarily a teaching institution and as this report will show, a significant majority of Concordia's resources and energy are directed at this goal. This report pertains to only one of the four faculties at Concordia and only at a piece of that Faculty's activities. To extend this report and its revelations to the entire Faculty or beyond would be unjustified and unfair.

Although a forensic auditor's report is intended to represent factual information free of interpretation, we provide significant narration for the purpose of ensuring that the technical and complex issues discussed herein are clearly conveyed to all readers of this report.

We provide detailed analysis of several of the accounts in question commencing on page 35. This is intended to demonstrate the complex transfers and re-transfers which occurred in these accounts as well as irregularities which may exist within specific accounts. It does not intend to represent all of the accounts affected by such transactions since to do so would be too voluminous and confusing with no additional benefit.

It is important to understand that our audit did not extend to any operating accounts, capital accounts or accounts outside of the Faculty of Engineering & Computer Science. Further, our report does not comment on the many aspects of the University's accounting and internal control systems which are functioning properly. It merely focuses on the deficiencies and irregularities which have come to our attention during our investigation.

The Researcher, The University and The Government

Natural Sciences and Engineering Research Council of Canada (NSERC)

NSERC grants are the largest single source of research funding available to the University.

These grants are subject to specific rules and procedures which govern the awarding of research funds as well as the responsibilities of the principal investigator (the applicant); the University and NSERC itself.

An NSERC grant is awarded to the researcher — not the University. The researcher must meet certain requisites, among which is an academic appointment at a Canadian university.

Rule 184 of the NSERC Award Guide stipulates:

- The researcher authorizes expenditures in accordance with NSERC regulations and with university policies.
- The university administers the grant funds and establishes appropriate policies, controls and systems to ensure that NSERC policies and regulations are followed.
- NSERC defines the conditions under which grant funds may be used, monitors the use of funds, and interprets its rules and regulations for the university and grantees.

Furthermore, when authorizing applications from researchers, university officials certify that "the institution will administer an NSERC grant on behalf of the applicant according to the provisions of the Awards Guide".(2)

Fonds pour la Formation de Chercheurs et l'Aide à la Recherche (FCAR)

Québec's granting agency is quite different in its treatment of the award. Rule 41 of the Guide des Subventions (1994-1995) states that grants are awarded by FCAR to the institution submitting the request or to the institution to which the applicant is affiliated.

Thus the control and administration of the FCAR grants would appear to be under the University's mandate and the principal investigator is carrying out these responsibilities on behalf of the University.

Contracted Research

Concordia's Contract Research Handbook differentiates grants from contracted research as follows:

"A GRANT is financial support for an investigator, or investigators, conducting research in a particular subject, area or field, without any formal detailed stipulations as to the direction of such research."

"A CONTRACT is an agreement between two corporate bodies, (namely the company and the university), to provide financial support for an investigator, or investigators, to conduct research in a particular subject area or field under specific stipulations and conditions."

This same Handbook states:

"It should be noted that provision of operating funds to universities are to support the academic endeavors of the university; diversion of these funds to subsidize research for a private corporation would be an inappropriate use of operating funds."

Our investigation has found that research grant funds were diverted to uses other than those permitted under the rules and that costs associated with specific contracts were not properly matched against the revenue from those contracts — and vice-versa. We have determined that the University procedures did not permit the Treasury or the Office of Research Services to adequately ensure that NSERC rules and procedures were being followed by the Faculty's researchers. We have also determined that University procedures do not exist to prevent NSERC funds from becoming commingled with non-NSERC funds thus making it difficult, if not impossible to segregate grant research activities from contracted research activities of the Faculty.

As our report is read, it will become apparent that at times it is difficult to clearly assign responsibility for the breach of rules and procedures since several Faculty are often involved in transactions and appropriate approvals have been obtained from various levels of University personnel outside of the Faculty. This aspect of a lack of financial and accounting controls will be addressed at the end of the report.

Academic Freedom in the University

"The teacher is entitled to full freedom in research and in the publication of the results, subject to the adequate performance of his other academic duties; but research for pecuniary return should be based upon an understanding with the authorities of the institution." (3)

The desire to create an atmosphere of Academic Freedom within the University demands the unilateral exercise of significant control by the researcher/teacher in the performance of all of their duties. As such, conventional financial and administrative controls which would be mandatory in any enterprise responsible for the vast sums of restricted fund money and resources under the University's control are virtually non-existent.

A basic element of the University's system of control thus falls on the integrity of the researcher/teacher. Proper behavior becomes all-important as custodians of public funds since accountability is to oneself rather than to a network of checks and balances structured around proper division of duties.

"Grants of money from the outside to the individual tend to strengthen the hand of the person who controls the expenditure of the funds — the individual scientists, a research group, a department head, a dean or the president's office. Thus the outside agencies affect the distribution of power within universities, whether they wish to or not, simply by the fact that they give the money to someone."(4)

³Louis Joughlin, Academic Freedom and Tenure, A Handbook of The American Association of University Professors (1967), p. 35

⁴ Hans W Baade, Academic Freedom, The Scholar's Place in Modern Society, 1964, p. 185

At Concordia University, the grants & contracts are under the control of the individual researchers to whom they were awarded. As such, their control of the money leads to their control of the expenditures which in turn leads to their control over all of the activities of the Faculty which are not funded by the operating funds.

Subject to severe budgetary constraints like all other publicly funded institutions, Concordia cannot provide the "frills" to the Faculty which are the envy of all research departments — the latest in technological equipment; an abundance of researchers and research assistants; and the access to collaborate with other scientists throughout the world.

The consequence of a society dominated by the doctrine of Academic Freedom, inhabited by those who are inclined to flaunt the rules of the university and at the same time are placed in a position of strength and power due to the huge sums of money — power — under their direct and complete control, is certainly a consequence which defies the basic postulates of sound financial control.

The failure to adhere to rules and procedures pertaining to Grants & Contracts coupled with the organizational structure which places the financial watchguards — Treasury — at a level just below the undergraduate student in the esteem of the scientists, has created an environment which tests auditing — and investigative examination — to its limits and beyond.

Defining Fraudulent Activities

Generally, fraud is associated with the theft of money. In the context of Concordia, one must consider several categories of irregularities which are all under the umbrella of fraudulent activities.

The Legal Issue

Black's Law Dictionary defines fraud as:

"all multifarious means which human ingenuity can devise, and which are resorted to by one individual to get an advantage over another by false suggestions or suppression of the truth. It includes all surprise, trick, cunning or dissembling, and any unfair way by which another is cheated."

Put more succinctly, fraud includes any intentional or deliberate act to deprive another of property or money by guile, deception or other unfair means.

The principal categories of fraud (or white-collar crime) are:

- → Misrepresentation of material facts
- Concealment of material facts
- → Bribery
- → Conflicts of interest
- → Theft of money or property
- Theft of trade secrets or intellectual property
- Breach of fiduciary duty
- → Statutory offenses.

Our report is not a legal interpretation of the events which occurred at Concordia during the past 13 years but a presentation of the facts and evidence we have uncovered during our investigation. The attorneys will have to determine whether illegal activity has transpired and will be responsible for recommending the pursuit of legal proceedings, if warranted.

Concealment of Material Facts

The essential elements of fraud based on failure to disclose material facts are

- That the researcher had knowledge of a material fact
- That the researcher had a duty to disclose
- ✓ And failed to do so
- With the *intent* to mislead or deceive the other party.

Conflict of Interest

Elements of a typical conflict of interest include

- ✓ A researcher taking an interest in a transaction
- That is actually or potentially adverse to the University
- Without full and timely disclosure to and approval by the University.

Embezzlement

Embezzlement is the wrongful appropriation of money or property by a person to whom it has been lawfully entrusted. Embezzlement implicitly involves a breach of trust, although it is not necessary to show a fiduciary relationship between the parties. The elements of embezzlement in regards to our mandate would generally be:

- The researcher took or converted
- Without the knowledge or consent of the owner (Concordia; Granting agency; Contracting company etc.)
- Money or property of another
- That was properly entrusted to the researcher.

The University's Rules

We have determined the following codification of rules & procedures at Concordia University, as they apply to Research & Contract Fund Expenditures:

- Concordia University Policy and Procedures for Travel and Other Allowable Expenses (Effective October 1, 1989)
- 2. Contract Research Handbook (Effective September 1, 1989; Rev. 3 Oct/92)
- 3. Awards Guide issued by NSERC
- 4. Guide des Subventions issued by FCAR
- 5. CUFA Collective Agreement

Compliance and non-compliance with the above will be commented upon throughout the report.

Proper Behavior in the Context of Academic Freedom

"A scientist who is a faculty member has certain obligations to the university which involve a short-range, voluntarily accepted set of limitations upon his freedom of action as one of the prices to be paid for the establishment and maintenance of a strong university over the long run. A scientist who ignores the rules of the game is not sustaining freedom against tyranny, or protecting science against administrators, but simply failing to exercise the responsibility without which freedom is meaningless. These observations are pertinent to faculty members who invoke academic, scientific, or any other kind of freedom to do whatever they want." [5]

It will become apparent to the reader of our report, that many researchers/teachers in the Faculty of Engineering & Computer Science participated in a deliberate scheme to manipulate account balances, transfer amounts of money, co-mingle research grants with contract funds and divert them to discretionary research accounts, all in the interest of *promoting research* defended by the premise that the funds were "intended to be used in research anyway".

Furthermore, we have discovered transactions initiated by researchers/teachers of the Faculty which have the effect of charging grants and contracts for resources — personnel & facilities — the cost of which is absorbed throughout the University's operating budget. The revenue derived from charging the grants and contracts is directed into accounts under the discretionary control of the dean or other department heads. Our report will detail the nature of these transactions and the ultimate utilization of the funds diverted.

⁶ Hans W Baade, Academic Freedom, The Scholar's Place in Modern Society, 1964, p. 187

The Elements of Fraud

As the Faculty of Engineering & Computer Science expanded over the period 1980-1993, so did its importance as a center for research and a beneficiary of NSERC grants, FCAR grants and private industry contracts. In fact, assisted research grants and contract revenue grew from \$3,992,000 (4.9% of total University revenue in 1980) to \$16,705,000 (7.9% of total University revenue in 1993) It is estimated that during the years under review, 40-50% of this money was housed in the Faculty, dominated for most of this period by Dean M.N.S. Swamy.

Simultaneous with the elevation of the University's importance as a research center, the Faculty spawned numerous important departments, the most notable in our investigation being the Department of Mechanical Engineering chaired by Dr. T. S. Sankar until his resignation in 1986 and the Concordia Computer Aided Vehicle Engineering Center (CONCAVE) chaired by his brother Dr. Seshadri Sankar.

During the period 1980-1993, while the Faculty's research endeavours expanded, the procedures and rules related to administrative and financial controls failed to keep pace. Consequently, accepted practices soon became established procedures and we have found that some of the researchers identified opportunities whereby they could use the loose, undefined structure to their personal benefit.

Just as the fire requires three elements to exist — Oxygen; Heat; and a Combustible Material, so does fraud require three components — Rationalization; Pressure; Opportunity.

Rationalization

It is easy to understand the researcher's justification for accessing funds without regard to their origin or intended use. The full spectrum of reasons can be supplied, but do they justify the actions?

Research is necessary.

The funds were intended for research anyway.

The funds belong to ME —

I got the grant/Contract

The funds relate to MY consulting - the University is not out anything I earned the money so I can do what I want with it.

Pressure

Pressure was certainly the most obvious and prevalent force at work within the Faculty.

Pressure emanates from the administration to maximize grants and contracts as it was widely known that a faculty member's evaluation for appointments, tenure and promotion is influenced by the amount of research performed and students supervised. Grants and contracts provide the faculty member with a means to enhance both of these requisites.

Pressure from peers is second to none as the academic and scientific world is rampant with praise and recognition for the researcher who breaks new ground, regardless of the discipline and we have seen only too well, in recent months the effects of peer pressure on researchers in the medical field which has resulted in alleged fraudulent misrepresentations at world renowned institutions.

The climate at Concordia is not unique to University or teaching institutions but a consequence of the nature of work performed in the University. Only when those who wish to abuse the system and take advantage of its weaknesses does the structure malfunction.

Pressure exists from the granting agencies to compete for funds. Criteria established by the granting agencies recognize the number of papers published, international acclaim received and notoriety in the scientific community when awarding grants.

All of this competition within the Faculty has created an environment in which the pressure is so intense that it overwhelms and blurs the vision of even those not directly benefitting from the improprieties.

Opportunity

The final component required for a fraud to occur is provided by the organizational structure of the University and the highly sophisticated, complex and thoroughly confusing computerized accounting system in place at the University.

The organizational structure has established the non-Faculty staff responsible for processing the paperwork in the Treasury department as paper-processors for the Faculty. At times when they have dared to question the propriety of a transaction or instruction which they have received from faculty, they have been chastised for having been the initiator of the original error requiring correction, or the explanation received has been so confusing and elaborate as to intimidate the clerk into carrying out the request for fear of appearing incompetent.

There is no accountability for transactions pertaining to accounts under a researcher's control. The Treasury department will process a request to transfer funds between two accounts if the document bears the required approval of the person controlling the accounts and the funds exist in the account. Similarly, expenses will be paid without regard for the appropriateness of the expenditure, merely compliance with the approval process. In many cases, supporting documentation is non-existent

The University's computer system has changed twice during the period under review. Once just prior to 1981 and again in 1991. While each change presented improvements, there were also increased accounts, new account numbers and with the last change, the ultimate resting place for an amount in the books of the University is estimated to be between 5000 and 8000 accounts.

The effect of this abundance of accounts has been to provide those so inclined with the ability to manipulate, transfer and move funds about in a manner which is truly astonishing. It is difficult to imagine that anyone is able to keep track of what is actually happening, if anyone in fact does. There seems to be no monitoring of final profit or loss on contracts as well as surplus or deficits

on grants. The balance — plus or minus — in the account is transferred to a discretionary research account under the control of the principal investigator on the grant or contract. (Exhibit 1-Page 66) This procedure contravenes NSERC rule 190. (Appendix E-Page 106)

To compound the problem of limited controls, it seems that those controls which did exist were often circumvented by agreement among researchers — either of their own free will or by intimidation. (Exhibit 2 - Page 67)

In many instances, all that was required to effect a transfer or payment was a memo signed by the researcher and the Dean who held the authority to approve such a transaction, without the need to provide explanation or documentary evidence supporting the transaction. In fact, in most instances, only the researcher in control of the account need provide the instruction. (Exhibit 3 - Page 68)

Another hinderance to proper internal control in the University environment is caused by the system of promotion and appointment. Faculty are evaluated and re-evaluated every few years, largely by their peers or in concert with written recommendations from their peers. Faculty at all levels are unsure what position they will occupy next, who will be their boss and whose approval they will require in the future. The allocation of Faculty resources to departments is controlled by the Dean and the allocation of department resources to researchers is controlled by the department chair. As such, they are inclined to provide their support in many instances where it may be unwarranted or improper.

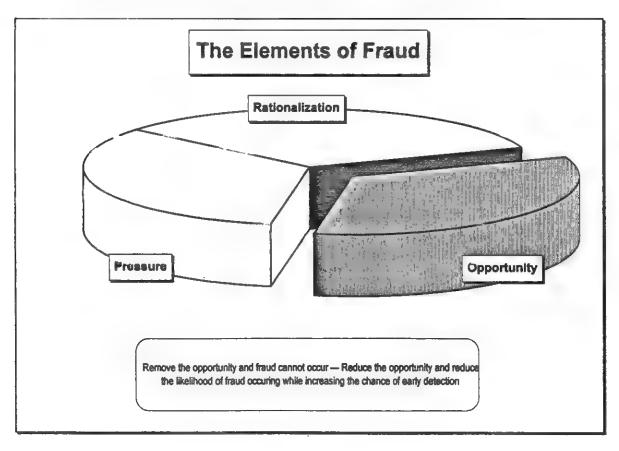
Thus, it is in the best interests of all to maintain a low profile, perform their job and above all not rock the boat!

The University has an Internal Audit department. During our nearly 5 month investigation which examined untold volumes of documents, memos, accounting and financial data and other internal memoranda pertaining to directives, questions, responses and sometimes debates over the

financial and accounting treatment of issues, not once did we notice a reference to or participation by the Internal Auditors.

During our numerous inquiries and interviews of personnel in the Faculty, Treasury, Office of Research Services and the Office of the Rector, the Internal Audit department was never mentioned.

This conspicuous absence was constantly noticed by us and we have questioned their lack of participation in these areas. Through our inquiries, we have determined that the Internal Audit function at the University is viewed as one of assistance to the end users of the accounting system at the University as it relates to minor accounting related questions rather than to one of financial watchguard. Thus the department may be doing their intended job— and probably quite well— but they are not functioning as Internal Auditors in the traditional sense.



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The Restricted Fund Accounts

The University maintains three global funds — Operating; Capital; and Restricted. All grants, contracts and donations for research are in a segregated group of accounts referred to as Restricted Funds in the financial statements of the University.

The major sources of these funds in 1993 were as follows:

Funding Source	University Total	Faculty Total	Faculty Percent
NSERC	\$6,436,000	\$3,899,000	60.6%
FCAR	2,575,000	1,129,000	43.8%
SSHRC (6)	1,495,000	-	0.0%
MESS (7)	1,656,000	-	0.0%
Internal Grants for Research	1,700,000	755,000	44.4%
Other Grants from External Agencies	2,337,000	376,000	16.1%
Private Industry Contracts	506,000	379,000	74.9%
	\$16,705,000	\$6,535,000	39.1%

Estimates by the Treasurer put the number of research accounts at 1800 of which between one third and one half are related to the Faculty. Other non-operating accounts — Contracts & Discretionary Research Accounts — of the Faculty could add an additional 300-400 accounts. This results in approximately 1000 accounts to control the research activities of the Faculty.

⁶ These are grants from the Social Sciences and Humanities Research Council, none of which are related to the Faculty of Engineering and Computer Sciences.

⁷ In 1990, the Québec Ministère de l'ensignement et de la science (MESS) agreed to pay 15% of the value of the research grants awarded to members of the University by granting agencies meeting MESS eligibility criteria. The purpose of this was to underwrite some of the indirect costs incurred by the University as a result of its members involvement in funded research activity.

Each account is under the designated control of one individual (the principal investigator) who is, alone, responsible for the expenditure of the funds in the account, within certain very broad constraints. Where the expenditure has been incorporated into the budget for expenses established upon execution of the contract or application for the grant, the expenditure is processed without question provided the necessary authorizing signature (of the principal investigator) accompanies the requisition.

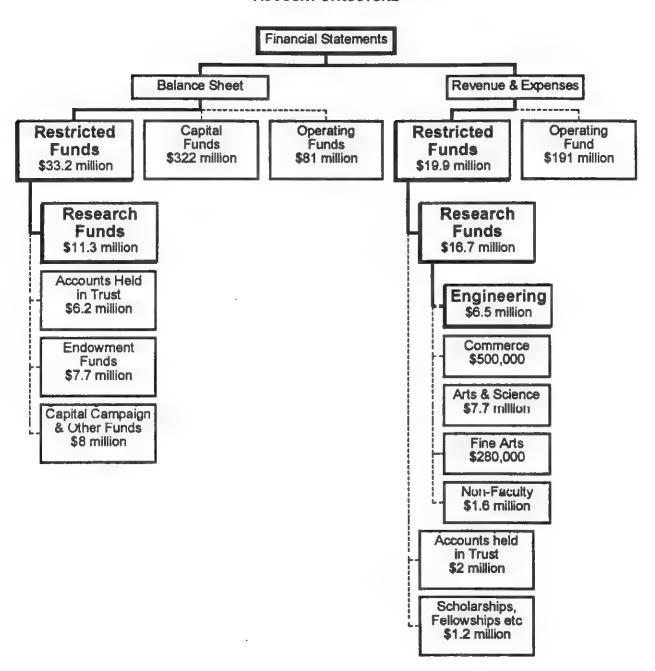
Treasury relies on Research Services to verify that the expenditure is in conformity with the nature of expenditures permitted under the grant application. Treasury makes no effort to determine the validity of the expenditure being reimbursed other than that the vouchers attached are originals and agree in amount to the claim submitted. If the expense report contains the appropriate signatures, payment is made.

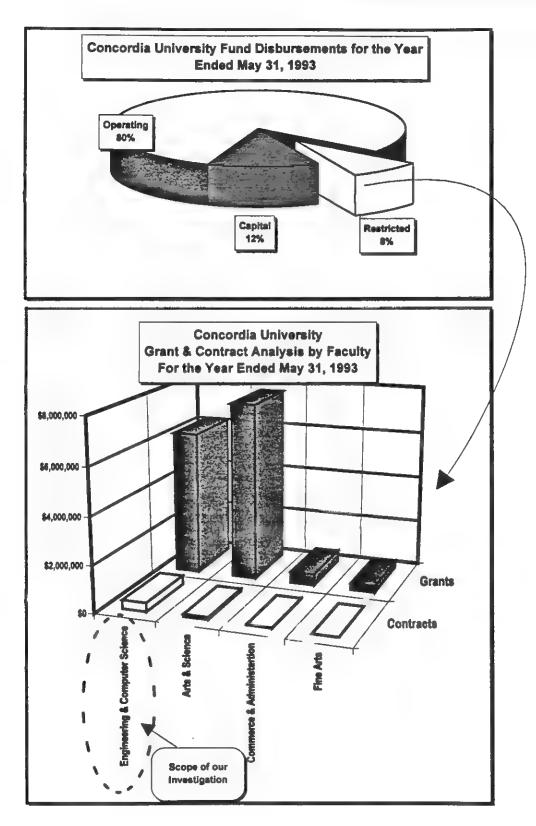
The next two pages depict the structure of Concordia's accounts and identifies those which are the focus of our investigation. It can easily be seen from these graphics that our investigation focused on a small piece of the overall activities of the University, not to minimize the seriousness of the findings in our report but to place them in proper perspective.

The irregularities uncovered in the Faculty should not cast aspersions on the University as a whole. Nothing in our investigation has indicated to us that the opportunities seized by specific individuals in the Faculty are being replicated elsewhere in the University.

CONCORDIA UNIVERSITY

ACCOUNT STRUCTURE





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The Movement of Funds

We have attempted as best as possible to identify the research accounts — other than NSERC & FCAR —belonging to the Faculty and have analyzed them in detail for the period 1982-1993. During this twelve year period, our analysis identified cash receipts credited to these research accounts in the amount of \$16,692,365

In addition to the cash received in these accounts, transfers into these accounts amounted to \$10,506,488 and transfers out of \$7,466,164. These transfers are recorded by means of a journal entry which is an accounting technique used to redistribute an amount from one account to another. Typically, these reallocations are required to correct errors which occur during the posting process of the expenditures to the various accounts.

Since there are so many accounts to which amounts can be posted, it would seem reasonable that the number of errors which are committed would be larger than normal. However, the quantum of journal entries which we discovered upon examination of the restricted funds of the Faculty were beyond expectations

Since most transfers do not describe which is the other account affected by the journal entry and most journal entries could not be located for our examination, it is not possible to accurately determine the amount of transfers which were incestuous among the contract & discretionary accounts and which came from NSERC grants, FCAR grants or operating budget accounts.

Based upon the information which we were able to obtain, we estimate that the net amount of transfers into these accounts is between \$5,000,000 and \$7,000,000.

Our investigation produced the following explanations for many of the above transfers:

- To close balances in NSERC & FCAR accounts.
- Reallocation of salaries to NSERC & FCAR accounts.
- Charges for Faculty overhead and central services to NSERC & FCAR accounts.
- Charges for equipment purchases allocated to numerous NSERC & FCAR accounts, sometimes over several years.
- Computer charges to NSERC, FCAR & Contract accounts credited to discretionary accounts of Dr. M.N.S. Swamy; Dr. T. S. Sankar or Dr. S. Sankar.
- Charges to Contract accounts for principal investigator's salary allocation.(8)
- Unexplained & undocumented transfers of amounts from Contract accounts to discretionary accounts, sometimes under the control of the same researcher and sometimes under the control of Dr. Swamy or Dr. T. S. Sankar.
- Charges to various NSERC accounts for what appears to be a 5% levy by Dr. Swamy which goes into a discretionary account under his control. (9)
- Charges to NSERC & FCAR accounts for computer maintenance credited to discretionary accounts.
- Allocations from the University accounts to the miscellaneous research accounts of the Faculty (under the control of the Dean) representing a partial reimbursement of the overhead earned by the University on contract revenue.

Due to the magnitude of the number of journal entries and accounts coupled with the fact that most entries can not be located for years prior to 1991 without extensive searching, if at all, it is not possible to quantify the amounts related to any of the particular categories of transfers. However, elsewhere in this report we shall comment specifically on some of the above techniques used to divert & co-mingle the funds creating confusion and a difficult — sometimes impossible — trail to follow.

⁶ The agreement with the researcher permits a certain amount of private consulting (52 days per fiscal year) which can be taken as an Honorarium with direct payment through payroll to the researcher or the amount can be transferred to a miscellaneous research account under the control of the principal investigator for use in research.

⁹ In 1988 a program was initiated at the University to coordinate the maintenance of the Computer Resources of the Faculty. This CORE program is reviewed on page 62.

Vendors

Disbursements to third party vendors are quite well controlled and our examination included scrutiny of over 130 accounts. (Appendix A - Page 89)

Our examination focused on two primary distributions of funds:

- Payments to companies owned by principal investigators or to companies with whom principal investigators have indicated close relationships.
- Reimbursements to individuals of expenses claimed for travel, promotion etc.

Since the University's policy is to retain documents supporting disbursements for a period of approximately seven years, in most instances we were only able to examine supporting documentation dating from 1986.

Payments to Private Companies

During the course of our audit we discovered numerous payments of a recurring nature to several companies. Upon further investigation it was determined that these companies belonged to the researcher/teacher in control of the related contract against which the payments were charged. Under the faculty contract of employment, researchers are permitted, within limits, to perform private consulting and either receive the income directly or have it allocated to their miscellaneous research account.

"A full-time faculty member shall not receive payment for more than 52 days work in any academic year (June 1-May 31)" (10)

Our examination identified, among others, the following companies:

Company	<u>Shareholders</u>	
Seshadri Sankar Inc.	Seshadri Sankar	75%
	Lakshmi Sankar	25%
Cie-Tech Inc.	Seshadri Sankar	100%
Cansan Inc.	Thiagas S. Sankar	50%
	Seshadri Sankar	50%

We did not find any payments to Cie-Tech and only one minor amount to Cansan. However, payments to Seshadri Sankar Inc. and/or Seshadri Sankar for consulting services or honoraria amounted to \$114,944 from November 1987 to October 1993 (Appendix D-Page 103)

The Liquid Tanker Stability Contract

This contract demonstrates circumstances which denote violations of the collective agreement as it relates to conflict of interest, paid outside consulting and required prior notification of paid outside consulting.

In June 1985, Seshadri Sankar Inc. was awarded a contract from the Department of Supply & Services (DSS) in the amount of \$288,063. In November 1985, the University and Seshadri Sankar Inc. entered into a sub-contract on this same project for an amount of \$73,670 with Dr. T. S. Sankar as the principal investigator on the contract. This contract was to perform a "study on liquid tanker stability".

We questioned Dr. S. Sankar about this contract and he provided us with the following information:

- ♦ He conceived of the idea for the study and proposed it to DSS.
- ♦ DSS accepted his idea and decided to submit the study for public tender
- ♦ Since it was DSS's policy to provide preference to private industry over

 Universities for contracts of this type, Dr. S. Sankar elected to bid on the contract
 through Seshadri Sankar Inc. rather than through the University
- Prior to bidding on the contract, Dr. S. Sankar claims to have discussed his intentions with Dean Swamy. (Dean Swamy denies this assertion by Dr. S. Sankar.)
- ♦ If there is a conflict of interest "it is at the Dean's level since he did not transmit the information to the Office of Research Services" according to Dr. S. Sankar.
- ♦ To his knowledge, the University became aware of the contract right after it was awarded to Seshadri Sankar Inc., but he is unsure as to how.

- He is unsure as to why a piece of the contract was subcontracted to the University rather than have Dr. T.S. Sankar perform his work for Seshadri Sankar Inc. directly.
- ♦ With respect to the CUFA agreement regarding the number of days a Faculty member may work on outside consulting, Dr. S. Sankar is of the opinion that he can work for 52 days plus evenings, weekends, holidays and vacation days. He calculates the number of days he can perform outside consulting on an annual basis to be:

Total working days as per CUFA contract	
(52 weeks @ 5 days)	260
Deduct:	
Annual Vacation	22
Statutory holidays	11
Allowable outside consulting	_52
Net working days	175
Days per year	<u>365</u>
Days available to Researcher for	
outside consulting	190

There are several flaws in this rationale, the most obvious being his conclusion that the "secondary" job of outside consulting is permitted to occupy more days than the primary job with the University.

The operational clause in the CUFA agreement is 24.01 which states:

"Members may engage in paid or unpaid outside professional activities under the following conditions:

- a) such activities must not interfere with the performance of the member's
 assigned duties and responsibilities;
- b) a member shall not devote more than one (1) day equivalent per week to such activities in any academic year;"

The Contract Research Handbook is more specific in its interpretation of the clause as previously cited.

Since Dr. Sankar claims to have done his share of the work on this contract on his own time at his home and since it was done during the same period of time as the Bombardier Contract (see page 36) Dr. Sankar would have performed in excess of 52 days of outside consulting.

We are unable to reconcile ourselves to Dr. S. Sankar's point of view and therefore conclude that Dr. S. Sankar has violated the rules with respect to the maximum allowable days for outside consulting.

Further, Dr. Sankar has violated clause 24.03 a) of the CUFA agreement which states:

"In the case of paid outside professional activities, the member shall report annually to the Dean/Director on the nature and scope of the activities and shall obtain prior written approval from the Dean/Director...."

Dean Swamy has confirmed to us that at no time did Dr. S. Sankar, or any other Faculty member, comply with the above clause of the collective agreement.

The Development of a Vehicle Dynamics Expert System Contract

This contract for \$444,121 contains elements which suggest the use of grant monies from Action Structurantes for the benefit of this private contract, similar to the irregular utilization of researchers paid by this grant for work performed on the Bombardier Contract (see page 36) This contract demonstrates circumstances which denote violations of the collective agreement as it relates to conflict of interest, paid outside consulting and required prior notification of paid outside consulting.

In 1990 the Department of Supply and Services awarded a contract to CIE-TECH INC. in the amount of \$444,121 for the "Development of A Vehicle Dynamics Expert System".

During our interview with Dr. S. Sankar, he provided us with the following statements concerning this contract:

- This contract did not go for public tender by DSS but was awarded directly to CIE-TECH INC.
- This contract is not of a research nature because there is nothing to publish upon its completion. It is strictly for the development of computer software related to Vehicle Dynamics.
- Only contracts which have the ability to result in some form of publication in a paper at the conclusion of the work would be of interest to the University.
- In view of the above, Dr. S. Sankar did not divulge any details about this contract to University officials.
- The Concave center was awarded a grant under the Programme D'Actions

 Structurantes Pour Le Soutien D'Équipes De Recherche Liées Au Virage

 Technologique. The purpose of this grant, among others, was for a 5 year

 program covering a large team project in Vehicle Dynamics. Among the several

 people who were paid from the \$450,000 grant were Subash Rakheja and James

 Alanoly.

Dr. S. Sankar confirmed that Subash Rakheja worked on the Vehicle Dynamics contract but all of his work was done off-campus and he was paid by CIE-TECH INC. for his work.

During our interview with Dr. Swamy, his comments with respect to the interest of the University in contracts which may or may not have publication features were:

"Not entirely correct"

"Development work is part of University work"

"Even then - it should have been brought up to the University"

"It is too large an amount of money for him not to have discussed with the Dean and the Vice Rector"

Due to the materiality of the amount of the contract and the overlapping of the contract subject with that of the Action Structurantes program described by Dr. S. Sankar, we are also of the opinion that Dr. S. Sankar should have informed the University of this contract and provided the University with the opportunity to define its own level of interest.

Expense Reports

Our examination of expense reports disclosed occurrences of duplicate expense claims, claims for personal expenses camouflaged to appear like University business expenses and conflicting expenses for identical times and dates at different locations or cities.

Our analysis included a detailed examination of all vouchers and supporting documentation pertaining to the above reimbursements and we identified several irregularities, inconsistencies and contradictions in many of the above items (Appendix B-Page 93). However, the majority of the items appeared proper.

Our examination of direct reimbursements to specific faculty revealed the following amounts for the three most noteworthy faculty members:

	Dean Swamy	Dr. T.S. Sankar	Dr. S. Sankar
1986	513.11		648,90
1987	10,300.32	2,452.96	1,695.33
1988	8,857.50	9,453.01	1,511.62
1989	14,555.45	9,040.87	5,063 25
1990	12,687.98	8,912.95	4,298.58
1991	8,425.45	12,515.93	4,872.67
1992	12,509.53	16,083.30	4,939.59
1993	4,128.52	19,897.64	401.88
	\$72,177.86	\$78,356.66	\$23,431.82

Employment of Robert Morris

Our investigation reveals that Dr. T.S. Sankar used University funds to pay for a student to perform work at his personal residence one day per week while employed in Dr. T.S. Sankar's department as general secretarial help during the summers of 1988 and 1989.

Robert Morris was a student who was hired during the summers from 1986 through 1989 as an assistant for Dr. T.S. Sankar. We spoke with Mr. Morris and he explained that during the summers of 1986 and 1987 he was employed three and four days per week respectively by Concordia University. For this he was paid by Concordia from their Payroll Department.

During both of these summers, he also spent one day per week at the personal home of Dr. T.S. Sankar performing various chores in and around the house (Robert Morris specifically cited mowing the lawn, and dusting). For the work at Dr. Sankar's house, Robert received payment from Dr. Sankar in the form of cheques drawn on his personal bank account.

In the summer of 1988, Robert's summer employment with Concordia changed such that he was now being paid for a full five day work week. However, Robert was still working one full day per week at Dr. Sankar's home performing the same tasks as the previous two summers. During 1988 and 1989, Robert received no additional compensation from Dr. Sankar for this work unless he put in additional weekend work at Dr. Sankar's home.

When questioned about the above, Dr. T.S. Sankar confirmed that Mr. Morris was employed as an assistant for word processing and file work as a departmental secretary. He further confirmed that Mr. Morris worked at his personal residence as described by Mr. Morris but emphatically denied that he was paid by the University for this work.

Our examination of Mr. Morris' payroll records for 1988 and 1989 revealed that Dr. T.S. Sankar signed time sheets for both summers authorizing payment to Mr. Morris for 5-day weeks, describing his job as "Data Processing".

Mr. Morris' statement and the timesheets clearly contradict Dr. T.S. Sankar's assertion that he was not paid by the University for the day per week which he worked at Dr. T.S. Sankar's personal residence.

An Analysis of Research Accounts of the Faculty

The following pages will summarize the activity of several accounts of the Faculty. During our investigation we examined all identified non-NSERC & FCAR accounts — approximately 300-400— and present herein examples of our findings. Time and cost does not permit the inclusion of all of the unusual or abnormal transactions we have seen, nor does it permit us to pursue every suspected irregularity to a proper conclusion.

The graphic on page 30 provides an overview of the account organization at Concordia and within the Faculty. Those accounts which follow all fall within the Restricted Funds Accounts of the Faculty, which was the focus of our investigation.

From this graphic it becomes obvious that our investigation and its findings relate to a small piece of the University's activities. Our report must be read with this in mind.

Account X69 - Bombardier Inc. LCNGV Project

Dr. S. Sankar's used personnel paid in part by University operating budget funds and grant funds for the performance of an industry contract for which most (\$72,700) of the proceeds were directed by him to his private company.

Of the total paid to Seshadri Sankar Inc. and/or Seshadri Sankar, \$72,700 was paid as consulting fees relating to a contract with Bombardier Inc. referred to as the LCNGV Project. This contract commenced in April 1987 and was concluded in the late summer of 1989.

Total contract revenue amounted to \$110,400 which was utilized as follows:

Payments to Seshadri Sankar Inc. and/or Seshadri Sankar	\$72,700.00
Supplies	134.76
University overhead recovery	10,514.00
	83,348.76
Balance in account on termination	27,051,24
Contract Amount	110,400.00

Upon completion of the contract, a request was submitted to Dr. S. Sankar from the grants coordinator in the Treasury office, requesting instructions with regard to the balance in the account. Dr. Sankar instructed the coordinator to charge the account with a piece of equipment which was to be recorded as "supplies and materials" in the amount of \$5051.24 (actually only charged \$4,551.24 since there were insufficient funds to cover the full cost of this equipment) and the balance — \$22,500— was to be transferred to account L01 (more fully described on page 44) "towards the use of the test facility at CONCAVE" (Exhibit 4-Page 69)

There are a number of irregularities concerning this contract:

- A telephone interview with Mr. James Alanoly (Exhibit 5 Page 70) indicates that he spent a great deal of his time completing the contract at the CONCAVE facility with another research assistant, Fred Labelle. This information is consistent with a letter from Dr. S. Sankar to Bombardier Inc. in which he makes several references to J. Alanoly. (Exhibit 5 Page 71)
- In a telephone interview, Fred Labelle confirmed to us that he spent over 50% of his time on the Bombardier Inc. LCNGV project working directly under James Alanoly who was the primary researcher on this project.
- There are no charges to account X69 for either of the above two salaries. In fact their salaries are charged as follows:

	Account Description	Amount
James Alanoly	B13 - NSERC/Bombardier Research Grant	402.30
	R01 - Dean Swamy - NSERC salaries	6,685.33
	Z13 - S. Sankar Action Structurante (11)	34,102.14
	240155 - Dean of Engineering Office	
	Professional Salaries(12)	34,080.83
Fred Labelle	B13 - NSERC/Bombardier Research Grant	11,740 00
	L50 - S. Sankar Account (13)	24,470.00

¹¹ This account represents a Québec Government grant under the Programme D'Actions
Structurantes Pour Le Soutien D'Équipes De Recherche Liées Au Virage Technologique. The purpose of
this program is to encourage and promote scientific research at the University level. Permissible
expenditures include salaries and equipment under the program.

¹² This is an operating budget account used for full time professional employees — Assistant to the dean; Budget officer; Coordinator - Academic programs; Coordinator - student affairs — with no relationship to contract or grant research accounts.

¹³ This account was opened in 1987 in connection with an award of \$450,000 from the Ministère de l'Enseignement Supérieur et de la Science under the program "Soutien au renforcement des liaisons Universités-industries et de la recherche dite de transfert" for the CONCAVE center.

The original contract has no provision for any equipment purchase substantiating the requested transfer of the amount for equipment, to be coded as supplies and materials. However, there is provision in the original contract estimate for supplies & materials of \$4,686.

When questioned about the participation of James Alanoly and Fred Labelle on this contract, Dr. S. Sankar offered the following explanations:

- Both Alanoly and Labelle worked on the contract.
- Payments for "computing facilities" include a charge for the technician or researcher's
 time and therefore Alanoly and Labelle's cost is charged to the contract.
- Payments to Seshadri Sankar Inc. are in accordance with the original budget which was approved by the Office of Research Services, the Dean and the Vice-Rector. If there was anything wrong, it is their responsibility, not his.
- All work performed by Seshadri Sankar on the contract was performed at the CONCAVE center.
- With regard to the purchase of unbudgeted equipment, he said "I thought it was materials. If this is wrong they (Treasury) should have told me that".

Dr. Swamy has stated that he "Never heard of a situation where the equipment hourly rate included the cost or labour associated with the equipment usage". This coincides with our investigation during which we never came across this contention. Further, if the salaries were included, it would preclude the University from recovering overhead which is calculated as a percentage of salaries.

Dr. Swamy then added that if he knew at the time that James Alanoly was working on the Bombardier contract he would not have authorized the salary support through his account.

Thus, we conclude that Dr. S. Sankar's assertions are not plausible in this instance and that he has used personnel paid in part by University operating budget funds and grant funds for the performance of an industry contract for which most of the proceeds were directed by him to his private company.

Account X58 - T. S. Sankar - Study on Liquid Tanker Stability

This sub-contract for an amount of \$73,670 was negotiated between the University and Seshadri Sankar Inc. for no apparent reason other than to appease the University after it became aware of the \$288,063 contract which Seshadri Sankar was awarded by the Department of Supply & Services.

Our investigation concludes that the account contains invoices for computer charges which are improper and only created as documentation to support and conceal an actual contribution towards the acquisition of equipment which is not permitted under the contract budget.

We further conclude that Dr. T. S. Sankar has violated the provisions of the CUFA collective agreement as they relate to paid outside consulting.

In June 1985, Seshadri Sankar Inc. was awarded a contract from the Department of Transport in the amount of \$288,063. In November 1985, the University and Seshadri Sankar Inc. entered into a sub-contract on this same project for an amount of \$73,670 with Dr. T. S. Sankar as the principal investigator on the contract Account X58 was established for this sub-contract Our analysis of this account shows that detailed invoices were issued to Seshadri Sankar Inc. for the following charges:

Dr T S Sankar	82 days	\$20,140
Dr. Vatistas	48 days	5,760
Overhead		7,770
Computer Charges		37,000
Typing Etc.		_3,000
		\$73,760

Disbursements from the account were as follows:

Dr. T.S. Sankar	\$20,140
Dr. Vatistas	5,854
Overhead	7,770
Computer	37,000
Typing Etc.	<u>2906</u>
	\$73,670

This account is of interest for the following reasons:

- In 1988 account X58 was charged \$30,500 which was documented as a "minor equipment purchase" of a Digital Equipment Corp. computer(14).
- In 1990, the research services coordinator at the Treasury office noticed that there was no provision in the contract to purchase equipment and advised Dr. T. S. Sankar accordingly. Dr. T. S. Sankar then arranged to have three invoices prepared by Dr. S. Sankar charging account X58 for "computing services provided by the CONCAVE center" as follows:

Sep 85-Nov 85	20 Hrs.	\$10,000
Dec 85-Aug 86	21 Hrs.	10,500
Sep 86-Feb 87	20 Hrs.	10.000
		\$ 30,500

¹⁴ This was actually an allocation of part of an invoice for a total amount of \$111,424 which related to an NSERC equipment grant. The conditions of the grant required the CONCAVE center to provide \$72,491 towards the purchase of the equipment.

- The above amounts along with a fourth invoice for \$6,500 were charged against account X58 and credited to account K21(15)
- On the same day March 26, 1990 Dr. S. Sankar instructed Treasury to cancel the original charge to account X58 for \$30,500 and charge account K21.

The effect of all of the above was to create documentation for the purpose of satisfying Treasury concerning the propriety of charging account X58 with an equipment purchase rather than computer charges.

This raises the question as to whether the computer charges are at all proper or fictitious invoices to accommodate the Treasury department. If they are fictitious then the funds have been improperly used. If they are correct, why were they not issued when the computer charges were incurred?

If these computer charge invoices are simply to create satisfactory documentation to appease Treasury and achieve the researcher's desired end result, are there others?

During our investigation we have encountered numerous such invoices for hundreds of thousands of dollars. Furthermore, these invoices are similar in nature and content to the invoices received from Seshadri Sankar Inc., Dr. S. Sankar and Dr. T.S. Sankar for honorariums and fees related to research which they are charging against contracts.

When asked about these computer charges, Dr. S. Sankar stated:

"The invoices were issued late because no one ever asked him for the invoices and that is why the invoice came at the end."

¹⁵ This is an account which opened in 1987 and is used to accumulate charges to various contract accounts for using CONCAVE computer facilities. The account is under the control of Dr. S. Sankar and has a balance of \$32,631 at May 31, 1993

• That they were "Based upon specific billing for specific usage", but he was unable to provide any supporting documentation to explain how they were calculated.

Based upon our review of the facts pertaining to this sub-contract and the dubious explanations provided by Dr. Sankar, we can only conclude that there is little, if any, substance to these computer charges for \$30,500 except to satisfy Treasury that the account is documented in accordance with the original contract budget, regardless of the reality of the situation — to contribute in part to the purchase of a \$111,000 computer.

In addition, the 82 days of paid outside consulting when added to the 42 days relating to the second term of the CAE/Algerian Continuing Education program (see page 51) results in 124 days of paid outside consulting for Dr. T. S. Sankar's during the two year period June 1985-June 1987, which exceeds the permissible maximum per year. Thus Dr. T.S. Sankar has violated this provision of the collective agreement.

Account L01 - S. Sankar - Private Industry

This account represents a commingling of funds from various sources and a varied use of these funds for needs as they arise. Several of the revenues credited to this account relate to work performed on particular projects without provision for overhead recovery on behalf of the University.

Account L01 was opened in 1987 and became account IC29 in 1992. Revenues are from several private industries including Remtec Inc., Via Rail, Bombardier Inc., Greyhound Canada, Northern Telecom, Secur, Hydro, Bell Helicopter etc. The total revenues from these various sources amounted to approximately \$178,000 plus \$62,500 for CONCAVE facility charges to:

Bombardier Inc. contract	\$22,500
Northern Telecom contract	\$10,000
Department of Supply & Services contract	\$30,000

This account has been used for travel, conferences, office supplies, telephone charges, parking for Dr. S. Sankar, and salaries. One of the larger charges to this account is a transfer of \$31,345 to cover deficits in three other contract accounts of CONCAVE. As at May 31, 1993 there remains an unspent balance in the account of \$21,121.

In general, this account represents a commingling of funds from various sources and a varied use of these funds for needs as they arise. Several of the revenues credited to this account relate to work performed on particular projects (Exhibit 6 - Page 75) without provision for overhead recovery on behalf of the University. The entire amount of the "contribution" is credited to account L01 with no charge to the account for the portion contemplated in the Contract Research Handbook for university overhead recovery.

Account 038-263 T. S. Sankar / M.N.S. Swamy Mechanical Engineering Research & General

This account was used by Dr. T. S. Sankar to accumulate \$157,418 from various NSERC & FCAR accounts. These charges to the grant accounts were camouflaged to appear proper under NSERC rules but in fact contravene the rules for use of NSERC funds.

The account was used in part to clear overspent amounts in other non-NSERC accounts and to contribute to a private industry contract account. Finally, a remaining balance of \$30,240.97 was transferred to account K15—a miscellaneous research account under the control of Dean Swamy, after he assumed control of the account in 1986. All of these transactions are serious violations of NSERC rules.

This account originates prior to 1975 and is entitled "Part-time work Mechanical Engineering" until 1985 when it is changed to "Mechanical Engineering Research and General". The account was under the control of Dr. T. S. Sankar until 1986 when control transferred to Dean Swamy upon Dr. T. S. Sankar's resignation as chair of Mechanical Engineering.

From 1980 to 1986, this account was credited with \$ 157,418 representing charges to various NSERC & FCAR grant accounts. These charges were described as follows:

1980	Calarias & commutes casts	22 150
	Salaries & computer costs	22,150
1981	Department Charges	27,150
1982	Copier Mechanical Engineering	15,200
1983	Typing Services	8,550
	Research material & supplies	8,550
1984	Actual amount charged	
	Research materials & supplies	22,084
1985	Actual amount charged	
	Research materials & supplies	24,514
1986	Research materials T. S. Sankar	<u>29.220</u>
		157,418

In 1984, Dr. T. S. Sankar issued a memorandum (Exhibit 7 - Page 76) which specifically instructs treasury about the wording to be used to record the above charges. Attached to this memorandum is a more precise and all-encompassing description of the purpose for the charges. There is a schedule which has been authorized by numerous principal investigator's, thus permitting the charge against their respective accounts.(16)

Our review of account 038-263 for the period 1980-1986 — while under the control of Dr. T. S. Sankar — indicates that there were numerous small purchases including publications & subscriptions; membership dues; copier charges; flowers; telephone charges & telephone answering machine; automobile rentals; courier charges; parking; and travel.

In addition, there were some large charges against the account during the same period for office equipment and an AES text processor. The account was also used to clear two overspent balances in accounts K13 & Q05. Both of these accounts were under the control of Dr. Kwok. K13 is described as "C. Kwok Engineering - Miscellaneous Sources" and has transactions up to April 1984. Q05 is described as "C. Kwok - Open Vehicle Project" and is inactive since prior to 1982. The remainder of charges to the account are represented by various payroll expenses.

When the account came under the control of Dean Swamy in December 1986, the charges to the NSERC accounts stopped and the charges against account 038-263 wound down to some minor telephone charges until October 1990 when the balance in the account in the amount of \$30,240.97 was transferred to account K15 — a miscellaneous research account under the control of Dean Swamy.

¹⁶ This would appear to be an attempt to ensure that the entries in the NSERC account which are audited by NSERC, would not raise questions. The NSERC Award Guide makes specific restrictions against charging NSERC accounts with "overhead expenses" (See Appendix E - Rule 207 - Page 107)

There was one additional charge to account 038-263 in May 1987 of \$13,000. Dean Swamy had undertaken to assist in the funding of Dr. Svoboda's Simulator project - account X11 (Exhibit 8 - Page 79) and satisfied this commitment with part of the funds accumulated in account 038-263 which had their origin, for the most part from NSERC grants.

Account 038-213 - Swamy Special Account

This account also violates NSERC rules by collecting a total of \$71,853 from various NSERC accounts to "cover the cost of Data Processing Equipment".

This account existed prior to 1982 and from 1983 to 1987 was used primarily to charge various NSERC accounts a total of \$71,853 to "cover the cost of Data Processing Equipment".

Authorization for some of these charges is included in the memos dated August 5, 1983 & June 27, 1984. (Exhibit 9 - Page 80)

Disbursements from the account were as follows:

AES Equipment	\$54,896
Xerox Equipment	5,336
IBM PC	2,931
Environmental lighting	1.000
	\$64.163

After 1987, the account was used to collect revenue from the sale of notes to students and to cover the copy cost of the notes until February 1993 when the account was closed and the balance of \$8,735.01 was transferred to account D009 (Account K15 prior to 1992).

Account 043-114/K15/D009 - General Research M. N. Swamy Misc. Sources

This account was used by Dr. Swamy to collect a total of \$88,981 from Dr. Gracovetsky's Domtar account under questionable circumstances and in 1986 a transfer was made into the account in the amount of \$10, 501 from an FCAC equipment grant account, contrary to grant rules.

Charges against the account are primarily related to Dean Swamy's travel, memberships, restaurants & promotion, books & subscriptions, printing etc. and an unspent balance remains at May 31, 1993 of \$82,489.

This account had its origin in 1974 with a deposit from Domtar which was directed into this account by Dr. Gracovetsky, the principal investigator on the contract at the time. Between 1974 and 1981, a total of \$88,981 was transferred from Dr. Gracovetsky's Domtar account to Dr. Swamy's account.

Dr. Gracovetsky stated that these payments were supposedly for the purpose of "contributing" to the overall Faculty overhead since he was using University facilities to conduct his research. However, he considered these payments to be mandatory for the purpose of being permitted to operate without interference and to have University facilities available to him, which were under the control of Dr. Swamy.(17)

During the period from 1974 to 1981, the charges against the account were minimal and related primarily to travelling expenses of Dean Swamy. By May 31, 1981 a balance remained in the account of \$87,665 which was transferred to account K15, the successor to 043-114 with the

¹⁷ Telephone interview between Dr. Gracovetsky & Bessner Gallay Schapira Kreisman on May 10, 1994.

introduction of a new computer system in the University at that time. The charges continued against the account in similar fashion for items primarily related to Dean Swamy's travel, memberships, restaurants & promotion, books & subscriptions, printing etc.

This account was also credited with payments received from the United Nations Industrial Development Organization (UNIDO) totalling \$33,082 of which \$15,000 was returned since the student to which that portion pertained, did not come to Concordia. As outlined in a memo to Treasury (Exhibit 10 - Page 81) these monies were intended to be used towards "computer time, materials, laboratory supervision, and training" of specific students. Our audit of the account did not indicate any such expenditures being charged against this account.

In 1986 a transfer was effected into the account from G49 — Engineering FCAC Rectors

Allocation - Swamy(18) — in the amount of \$10, 501. Some salaries have been paid out of this account and an unspent balance remains at May 31, 1993 of \$82,489.

¹⁸This grant account was opened in 1983 under Dean Swamy's control with a \$37,000 transfer intended for what appears to be the purchase of a piece of equipment. A small piece of equipment was purchased for \$4,595 and there were charges against the account in 1985 & 1986 for "PHYS PL" totalling \$21,903 leaving an unspent balance which was transferred into account K15. No documentation or further explanation was available to clarify the meaning and purpose of "PHYS PL" which is presumably some form of charge for the physical plant.

Account 038-118 - Continuing Education Courses - Dr. T. S. Sankar

This account accumulated funds which were intended to be used for departmental research. \$15,000 of these funds was transferred to the Chair of Hinduism as a contribution by Dr. T. S. Sankar and \$10,500 was transferred to a graduate students' tuition scholarship fund under the control of Dr. Swamy.

This account was opened in 1978 at the request of Dr. T. S. Sankar to "channel certain funds generated by this department by offering special courses and seminars in cooperation with the Continuing Education Department." (19) The graphic on page 54 depicts the sometimes complex transfers among several accounts which served to help conceal the transactions and confuse those who may have tried to follow them.

Our analysis of the transactions in the account from 1982 to 1993 (Appendix C-Page 102) indicates that revenues were from four main sources:

Various small amounts which appear to be fees for continuing education courses	\$20,009
First year's fees for "CAE Project - Continuing Education"	69,066
Second year's fees for "CAE Project - Continuing Education"	80,177
Computer charges to account X42(20)	14,300
	183,552
Balance forward - 1981	4,959
	\$188,511

¹⁹Internal Memorandum from T. S. Sankar to Mr. Lynn Perkins, Special Funds, Treasury dated January 9, 1978.

²⁰ This account is a Department of Supply & Services contract account under the control of Dr. Bhat.

The four significant transfers out of this account are:

Transfer to account K56 (21)	\$23,066	(22)
Transfer to account K56	18,000	(Z3)
Transfer to account K55 (See Page 61)	8,725	
Transfer to account 039-528 (24)	10,500	

We were unable to locate any files or documents explaining the purpose of the CAE or continuing education contributions, nor does anyone in the continuing education department have any documentation or recollection of these contributions, their origin or purpose.

In September 1986 this amount was transferred into account K56 and was redirected to account K55 by Dr. T. S. Sankar on June 26, 1987 — the same date that Dr. Swamy assumed control of K56 due to Dr. Sankar's resignation. In December 1987, Dean Swamy instructed treasury to "return" \$18,000 of the amount to K56 and return control of the account to Dr. Sankar.

A review of this account from the date of inception to May 31,1993 indicates no activity in the account until 1991 when a \$1500 award was issued (except for interest having been credited to the account annually on the credit balance).

In 1992 the account became account E219 — Dean's Graduate Tuition Scholarship. It was then transferred into account E119 — Dean's Graduate Tuition Scholarship — in what appears to be the combination of two accounts opened in place of one.

Private donations of \$4,000 and \$12,000 are deposited into this account in 1992 & 1993 respectively and graduate student research salaries commence being charged to this account in 1992. As at May 31, 1993 the unspent balance in this account amounts to \$7,064.

²¹ This account is a general discretionary account controlled by Dr. T. S. Sankar titled "Mechanical Engineering Miscellaneous"

²² This amount corresponds exactly to the last of three installments received pertaining to the *CAE Project" at the request of Dr. T. S. Sankar (Exhibit 11 - Page 82)

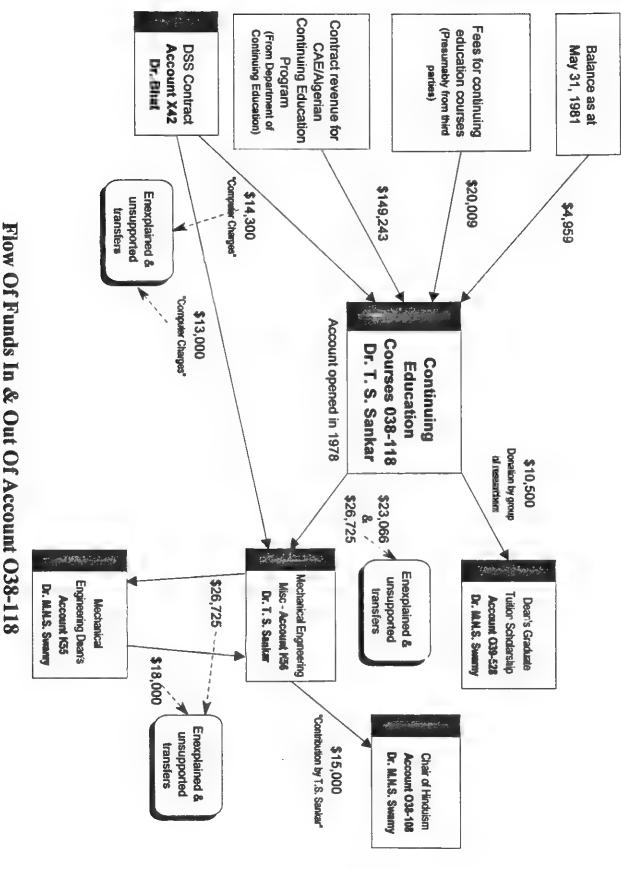
²³ This amount plus the next amount transferred to account K55, corresponds exactly to the last of three installments from continuing education, transferred on the instructions of Dr. T. S. Sankar (Exhibit 11 - Page 83)

²⁴ This account was opened at the request of Dean Swamy in 1988 in conjunction with an agreement among several faculty to "contribute" \$10,500 to this fund. (See Exhibit 12&13 - Page 84 and 85)

Furthermore, there is no documentation supporting the computer charges or relating them in any way to the continuing education courses.

Upon questioning Dr. T.S. Sankar about the CAE/Algerian project it became apparent that this was a private industry contract between the Continuing Education Department and CAE Electronics Inc. which had a contract with Algeria to train Algerians and part was sub-contracted to Concordia. Further, Dr. T. S. Sankar coordinated the development and delivery of the courses to the visiting Algerians and the amounts of \$69,066 and \$80,177 represent the fees agreed upon for this service.

Dr. T.S. Sankar was unable to provide any documentation to support the computer charges and acknowledged that the amounts which were deposited into his departmental research account relating to the fees for the CAE/Algerian Continuing Education program "Must be used for research and related services". Thus, when presented with the ultimate disposition of part of these funds from account K56 (See page 55) to the Chair of Hinduism he conceded this to be an improper use of the funds.



Page 54

Account K56 - T. S. Sankar Mechanical Engineering Miscellaneous

Our analysis of this account demonstrates additional unsupported charges to other contract accounts for computer charges. In addition, Dr. T. S. Sankar sold old equipment belonging to Concordia and deposited the proceeds into this account to be used by him, at his discretion.

Expenditures from this account are small in amount and are from various local stores as well as travelling, automobile rental, telephone and memberships. As at May 31, 1993 an amount of \$54,085 remains unspent.

This account was opened in 1979 at the request of Dr. M. N. S. Swamy for the purpose of depositing a cheque from Canadian Marconi for Dr. T. S. Sankar to conduct research on "Short-term random vibration analysis and reliability of sub-miniature incandescent lamp packages". In Dr. Swamy's memorandum (Exhibit 14 - Page 86) he states that "the money will be used to support a student to work on the project and also to buy some necessary equipment."

Our analysis of the account reveals that funds from numerous other sources were deposited into this account between 1980 and 1985, primarily relating to the sale of old equipment(25) as well as the transfer from account 038-118 in the amount of \$23,066 in 1985 In addition, \$6,500 was credited from account X42 (26) in 1985 & 1986 — \$13,000 total.

In September 1986 \$26,725 was transferred from account 038-118 (See Page 51) into account K56 and was redirected to account K55 by Dr. T. S. Sankar in June 26, 1987 — the same date that Dr. Swamy assumed control of K56 due to Dr. Sankar's resignation. On December 21, 1987, Dean Swamy instructed treasury to "return" \$18,000 of the amount to K56 and return control of the

²⁵ Lakehead University - \$4,000; Purchase of two sets of flowmeter/transducers; Sept. 1980
Nicolet Instrument Canada Inc. - \$6,841; Net difference between purchase of new equipment; trade-in of older equipment; and an NSERC grant received for the purchase of the new equipment.

²⁶ This account is controlled by Dr. Bhat and relates to a Department of Supply & Services Contract.

account to Dr. T.S. Sankar which effectively reversed the directive of the Vice-Rector of Finance dated July 10, 1987.

In November 1987, Dr. T. S. Sankar advised Dean Swamy of his desire to contribute \$15,000 from account K56 to account 038-108 — Chair of Hinduism(27) — from an amount of \$21,600 relating back to 1983/84 in connection with the CAE/Algerian project. In Dr. Sankar's letter (Exhibit 15 - Page 87) he states that the source of the funds result from fees for his professional work done for the Continuing Education department. As indicated earlier, this was an improper use of the funds and this was acknowledged by Dr. T. S. Sankar during his interview with us.

On December 18, 1987, Dean Swamy approved Dr. Sankar's contribution and requested that the Vice-Rector inform Treasury accordingly.

Expenditures from this account are small in amount and are from various local stores such as Alwin's Appliances; Pascal Hardware; Radio Shack; La Place Photo etc. There are also travelling, automobile rental, telephone and membership charges to this account. As at May 31, 1993 an amount of \$54,085 remains unspent.

²⁷ This account was opened in 1984 and under the control of Dean Swamy, to "create opportunities for interested students to undertake studies in Hinduism and its philosophy." (Fund raising letter soliciting financial support for the Chair in Hinduism.)

Account Q02 - M.N.S. Swamy Special Deans Account

This account and the next — Account K55 - M.N.S. Swamy Mechanical Engineering Dean's Account — characterize the misuse of funds by Dr. Swamy. The funds which are returned to the individual faculties are intended to be used in the faculty to support research which is not otherwise funded.

Dr. Swamy elected to establish an "Endowment Fund" with these monies as well as others also intended to be used in the Faculty for general research purposes. These funds were ultimately combined with others of similar origin in another account whose balance as at May 31, 1993 was \$1,033,230

This account originated prior to 1981 and is graphically represented on page 60 due to the complexity of transfers involved. Our analysis indicates that it was used to accumulate large amounts from the following sources:

Charges to various researchers' accounts classified as "principal allocations"	\$89,454
Return of overhead generated by the Faculty (90% of the 50% returned to Vice-Rector)	208,897
Charges to researchers' accounts for secretarial & computer charges as well as "lab rentals"	66,771
Revenue from The Technical University of Nova Scotia in connection with a CIDA contract	68,421
Balance forward at June 1, 1980 (presumably from	
similar sources to the above)	41.516
	\$475,059

Disbursements from this account were as follows:

Transfers to account 038-214(28)	\$304,000
Transfer of share of overhead to the Center for Building Studies	46,507
Miscellaneous amounts under \$5,000	61,650
Close account to K55	62,902
	\$475,059

This account characterizes the misuse of funds by Dr. Swamy. The funds which are returned to the individual faculties are intended to be used in the faculty to support research which is not otherwise funded.

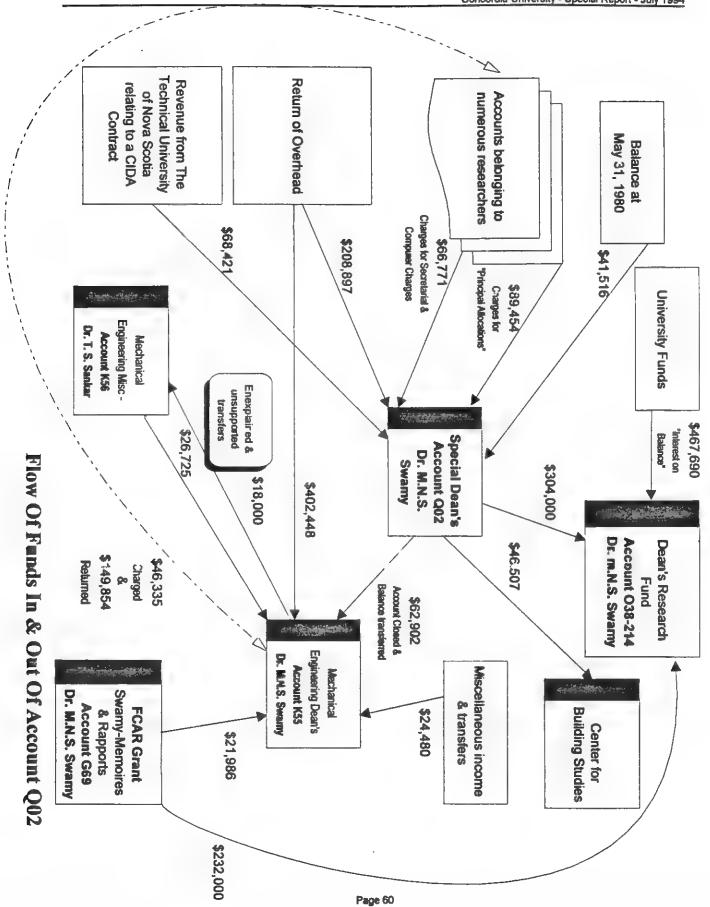
Dr. Swamy elected to establish an "Endowment Fund" with these funds as well as others also intended to be used in the Faculty for general research purposes. Although this was contrary to the intended purpose of the funds, Dr. Swamy's only justification was that it was done "with the knowledge of the Vice-Rector". This would seem to be the case as there was an agreement to credit the account with interest annually and thus someone at the administrative level had knowledge about, and apparently approved of this program.

There is nothing to support the calculations for charges made to other accounts for secretarial & computer charges as well as "lab rentals" or "principal allocations". When interviewed, Dr.

²⁶ This account was created with an initial deposit from account Q02 in the amount of \$150,000. Subsequent transfers from Q02 & its successor account K55 totalled \$386,000. This amount was augmented by interest credited annually from the University totalling \$467,690 from 1983 until 1991 after which date, no more interest was credited.

In addition, transfers of overhead returned to the Faculty for 1992 & 1993 as well as some miscellaneous transfers into this account added a further \$253,356. In 1993, a distribution was made to several faculty members' research accounts totalling \$193,726 and miscellaneous additional disbursements aggregating \$30,091 were made during 1993 leaving an unspent balance in account 038-214 as at May 31, 1993 of \$1,033,230.

Swamy could not provide any documentation supporting these charges and with the benefit of hindsight admitted that it "should not have been done".



Account K55 - M. N. S. Swamy Mechanical Engineering Dean's Account

This account continued the charges and transfers found in its predecessor — Q02 — until it was closed in 1992. During that time revenue to the account consisted of the following:

	Transfer from Account Q02	\$62,902	
	Return of overhead generated by the Faculty (90% of the 50% returned to Vice-Rector)	402,448	
	Transfer from account K56	26,725	
	Charges to researchers' accounts for secretarial & computer charges as well as "lab rentals"	46,335	
	Miscellaneous income & transfers	24,480	
	Transfer from FCAR grant G69 (29)	21.986	
		\$584,876	
During the same	period, disbursements from the account were:		
	Transfers to account 038-214	\$232,000	
	Transfer to account K56	18,000	
	Salaries	150,416	
	Transfer of share of overhead returned to various researchers	149,854	
	Miscellaneous expenses under \$3000	34.606	
		\$584.876	

The most notable difference between the activity of account K55 and its predecessor, account Q02 is the transfer of FCAR grant funds into a general faculty research account, contrary to the rules governing the use of grant funds.

²⁹ This account is titled "Swarny - Memoires & Rapports"

Account K48 - M. N. S. Swamy CORE Facility

This account was used by Dr. Swamy to accumulate \$212,043 from various NSERC & FCAR accounts to be used to fund expenditures within the Faculty in direct contravention to the NSERC rules.

Further investigation has revealed that in addition to the above transfers, additional charges of \$185,293 were made from 1982 to 1987, also violating NSERC rules.

In December 1987, the University established a Computer Resources fund — account Z24 - Swamy Computer Maintenance CRIGL — for the purpose of collecting funds from three sources(30). From 1988 to 1990, \$72,676 was transferred into account Z24 from various grant accounts. In addition, from 1989 to 1992, \$212,043 was transferred into account K48 — M.N.S. Swamy CORE facility — with matching contributions from the Computing Center totalling \$48,966. No contributions appear in either account from Dean Swamy as was outlined in the documentation we examined regarding this arrangement.

An examination of the NSERC & FCAR accounts for the period 1982-1992 revealed total charges against these accounts in the amount of \$390,055 of which \$185,293 was from 1982 to 1987 — prior to the above mentioned CORE program. Due to the limited availability of documentation and the poor description of the transfer entries, we were unable to trace the destination or ultimate use of these transfers dating back prior to the CORE maintenance program.

grants.

^{5%} contribution of operating grants from all researchers using the computational facilities directly or through their graduate students;

^{50%} matching contribution by the Dean of the funds collected from research grants; 25% matching contribution from the Computer Center of the funds collected from research

Analysis of Labour / Revenue

Our investigation has revealed that there is a very loose and sometimes trivial relationship between the accounts to which a salary is charged and the project upon which the individual has worked. We have also determined that it is not possible to match specific revenue with labour costs.

Given the above findings and the instances where we seriously question whether the University has received its fair share of the revenue related to all of the labour paid, the labour / revenue analysis raises the likelihood that a shortfall of revenue could exist to the extent of \$2,283,000.

During the course of our investigation, we analyzed the research contract accounts of the Faculty and determined that total salaries, fees & benefits paid during the period 1982-1991 totalled \$10,258,384 on revenue of \$15,500,692(31) which represents 66.2%

We then selected 30 research contract accounts at random from the period 1983 to 1992. The budgeted salaries, fees and benefits from this sample amounted to \$1,773.463 on total revenue of \$3,072,271 resulting in a rate of 57.7%.

On the basis of the budgets, the actual salaries, fees and benefits are 8.5% too high—\$1,317,558.

³¹ Since contracts do not result in residual profit or loss and are closed out upon completion of the contract, total expenditures and total revenue are approximately equal.

This could indicate:

- a) Serious deficiencies in estimating the true cost of performing the contract research resulting in significant deficits on a regular and consistent basis.
- b) Research salaries, fees & benefits expended without any related revenue.(32)
- c) Serious deficiencies in the accounting and allocation of salaries, fees & benefits to the accounts of the Faculty.
- d) Salaries, fees & benefits included in the research accounts for non-revenue producing research.

We have determined that it is the University's practice to match research revenues and expenditures annually by forcing the revenue amount reflected in the financial statements to equal the expenditure amount thus producing the illusion that research is not costing the University anything. There is no accounting for a surplus or deficit on any grant or contract. Thus the cost of research work performed at the University is not known.

Research is a part of the University's role. Thus, for research to cost the University is normal. However, we are of the opinion that if the University is to maintain an elaborate structure to account for the individual accounts in a detailed manner then this should be carried through to its logical conclusion, namely a final accounting

³² Using the rate of 57.7%, \$1,317,558 would relate to \$2,283,464 of revenue.

EXHIBITS

Exhibit 1 Sample Memo To Transfer Account Balances

#

INTERNAL MEMORANDUM

Changed

TO:

Mr. L. Tansey, Treasury, GM 700-12

PROM:

S. Sankar, CONCAVE, H 833-2

DATE:

Feb. 1, 1988

Re: Account B13

Lary will be

In order to balance the budget in this account, I wish to recommend the following:

- 1. Starting Jan 87, transfer all payroll charges to L50 account.
- 2. Referring to Apr. 87 Dec. 87 ledger (a copy is attached):
 - Transfer July Dec. 87 expenses of B13-157 (\$7,222,28) to L50-157.
 - Transfer July Sept. 87 expenses of B13-160 (\$10,406.13) to L50-160.
 - Transfer July Dec. 87 expenses of B13-165 (\$8,509.14)
 to L50-165.
 - Transfer 28/08/87 to Dec. 87 expenses of B13-167 (\$5,341.39) to L50-167.

Total = \$31,878.94

3. Account B13 with zero balance can be closed.

Thank you for your cooperation.

SS/nn

Enclosure

Sanker

Exhibit 2 Sample of Letter signed By all Researchers for Funds Transfers

DATE June 27, 1984

Re: Purchase of Data Processing Equipment

The undersigned have authorized transfer of the amounts indicated from their accounts to Account No. 038-213 as agreed last year in my memo on the above subject dated 83/08/05.

Name	Acct. No.	Amount Already Paid	Amount to be Deducted Now	Signature
A. Soliman	M-80	\$1000.	\$1000.	
B. Ashtakala	D-68	1000.	1000.	K-Asktakala.
A.S. Ramamurthy	A-90	2000.	-	
M.S. Nasser	A-92	2000.		- / - /
Z.A. Zielinski	A-71	1000.	1000.	Laulen
M.S. Troitsky	A58 606	1000,	1000.	m Straits Tev
O.A. Pekau	A-96	500.	\$ 500.	& Polark
A.M. Hanna	A-56	1000.	1000.	1/ 1/2/2/
H.B. Poorooshasb	B-68	500.	1500.	

* See attached mens from Dr. Tekan

Exhibit 3 Copy of letter for computer charges from Dr. S. Sankar

INTERNAL MEMORANDUM CONCAVE RESEARCH CENTRE Department of Mechanical Engineering

TO

Ms. Emily Karakul

Grants Coordinator Finance-Treasury

FROM

Dr. Seshadri Sankar

DATE

March 15, 1993

RE

CONCAVE computing charges for contract work

XF03 (X10)

For the duration of October 1 to December 31, 1992, the expenses incurred for the computer usage of 17.5 hrs @ \$600./hr is \$10,500.

Please bill DSS for this amount and credit CONCAVE computer account GC35 (K21)

Some

DR RP 20 XF03 7540 7 10,50c.

C.c. A. Williams

Exhibit 4 Instruction Memo From Dr. S. Sankar Relating to Bombardier Contract # X69

CONCORDIA UNIVERSITY INTERNAL MEMORANDUM

TO: Dv.	S. Sarker, C	ONCAVE, CR-201	or, Treasury, GM-	
FROM: S	mily Karakul,	Grants Coordinat	or, Treasury, GM-	700-12
DATE: M	ly 11, 1990			
•				
SUBJECT:	Your Account#:	X69		
	Balance at:	May 4, 1990	\$27051.24	
		V		
This contractionsed. Pleasyou.	of was terminated of asse advise immediat	on ely how you wish to han	and the account must dle the remaining surplus	now be s. Thank
Reply:				
1. Den	T \$ 5,051.	24 TOWARDS	EXPENSES (SUP	PLIES AND
			ms inc. in A	
L50 -	260.			
2. DEBI	T \$ 22,500	TOWARDS TH	HE USE OF TE	ST
FACIL	ITY AT CON	CAVE AND CI	ZEDIT ACCOUNT	L01
		•		
	Domko	30/05/90	<u> </u>	
Signature				

Summary of Telephone Interview with James Alanoly Re: Bombardier Contract X69

The following points were stated by Mr. James Alanoly during three separate telephone conversations pertaining to his research activities between 1987 and 1989 while employed at Concordia University, more particularly in the CONCAVE Center under the supervision of Dr. Seshadri Sankar.

- A) He is unsure as to which accounts his salary was paid from.
- B) He worked on several different Bombardier contracts during the period of employment which included the Computer Aided Design of Snowmobile Suspension Systems and Frames (a joint NSERC and Bombardier research project) as well as the Suspension Software project referred to as the LCNGV project.
- C) A significant amount of his time (in excess of 50%) during the period he worked at CONCAVE was devoted to the LCNGV project.
- D) All of his work was performed at the CONCAVE Center and he utilized CONCAVE Center facilities.
- E) With the exception of Bombardier, he is unaware of the names of any other corporate contacts for research projects on which you were working.
- F) To the best of his knowledge the only other individual who performed any work of significance on the Bombardier LCNGV project was Fred Labelle, a programmer at the time.
- G) Dr. S. Sankar did spend some time on the contract but proportionately far less than himself.
- H) He also confirmed that he as well as Fred Labelle and Mr. Gennady Popov, a graduate student working on his Ph.d. in engineering at the time, worked on the Liquid Tanker Project which he believes was a Department of Defense contract.

Copy of Letter Signed By Dr. S. Sankar Re: Bombardier Contract X69

CONCORDIA UNIVERSITY



May 17, 1989

M. Denis Germain Director, R & D Snowmobile Division Bombardier Inc. Valcourt, Québec JOL 2L0

Dear M. Germain:

Re: Suspension software - DG 88-195.

I am writing to you with regard to the proposal on the new schedule of activities (dated Dec 14, 1988), concerning the optimization and/or modification of the existing prototype software.

I wish to point out to you the following for each of the items listed in DG 88-195. Please note that, wherever appropriate, I have indicated by an asterisk (*) the work done beyond the original proposal.

1. WORK SCHEDULE

a) Analysis using the existing software, and submission of results.

Proposed date : 13 January 1989.
Actual date : 13 January 1989 (J. Alanoly).

b) Field testing by Bombardier and submission of results to CONCAVE.

Proposed date : 31 January 1989.
Actual date : 28 February 1989 (D. Boulanger).

- * Visit to Bombardier by J. Alanoly to examine and approve test set-up, equipment and procedure. (14 February 1989)
- C) Correlation of analytical and experimental measurements by CONCAVE.

Proposed date : 28 February 1989.

Actual date : 28 April 1989 (J. Alanoly).

CONCAVE RESEARCH CENTRE CR-200 DEPARTMENT OF MECHANICAL ENGINEERING 1455 DE MAISONNEUVE BLVD WEST MONTREAL, OUEBEC, CANADA H3G 1M8 TEL: \$14-848-7930 FAX: \$14-848-8635

Copy of Letter Signed By Dr. S. Sankar Re: Bombardier Contract X69

- * The data collected on the field was given to CONCAVE as ASCII data files on IBM-PC diskettes in its raw form. It was found that the signals were extremely noisy and otherwise distorted. A software was developed at CONCAVE to filter and process the signals prior to comparison with theoretical results.
- d) Modification to the software as per DG 88-088, excluding the finalization of the module GENMODEL.

Proposed date : 31 March 1989.

Actual date : 15 May 1989 (CONCAVE)

* Several improvements as well as bug-fixes have been made to the various modules of the software. The main ones are noted below:

ANALYSIS:

- Several queries posed to the user have been made more explicit.
 - . Order of control variables are now specified at the modelling stage, i.e., in GENEQN, and not in ANALYSIS or EQUALS. However, the user is given the option to change them in these modules also.

SKIPREP:

- . The algorithm for determining ski position has been improved so that it follows most profiles defined by continuously differentiable functions. However, in some rare instances, for specific relative dimensions of the profile and ski, it may not work. In this case the problem is indicated to the user.
- . SKIPREP communicates the information regarding ski and track length and starting position relative to the bump to the the program DYNAMIC, without user intervention.
- . 'Wheelbase' must be supplied by the user to DYNAMIC. This is necessary so that this dimension can be changed at will during dynamic analysis without redoing SKIPREP.
- . Each time the program is run it uses the default values as the final values from the previous execution.

DYNAMIC

- * . ANALYSIS.DAT is no longer used. The user may select from a menu the type of analysis to be performed.
- * NEWPAR.DAT is no longer required. The user may select from a menu any of the system parameters and change its

Copy of Letter Signed By Dr. S. Sankar Re: Bombardier Contract X69

value interactively. The parameters are given default initial values. The user has the option of supplying these in a data file also.

- . The software allows the use of user-defined springs and shock-absorbers by simply rewriting the FUNCTIONS that define the forces generated in these elements.
- . Distance between ski and bump is supplied by SKIPREP automatically.
- . The program indicates if any of the suspension units have exceeded their specified limits of travel. If this occurs, the user is given the option of STOPping the simulation or ignoring the condition and continuing. Continuing the simulation helps the designer to know what amount of travel should be available in order to successfully traverse a given terrain.
- * This program which was previously run in batch has now been made fully interactive with a user-friendly menu interface.
- * . The user can interactively specify system parameters, data file names, vehicle speed (km/h) or drop height (m), simulation duration, and outputs required. He can select from a menu of 32 different output measurements available.
- * The program automatically determines the static position (ride height and attitude), whenever the system parameters are altered. Previously the user was expected to supply the static position.
- The previous differential equation solver, RK4 (4th order Runge-Kutta), has been replaced by a more accurate variable order variable step-size Adam's method.
- e) Adaptation of the program in view of obtaining reaction forces at suspension joints.
 - As per discussion on becember 14, 1988, the proposed work in item (e) is to make an attempt to develop a software for obtaining reaction forces (refer to DG 88-088, BM 88-411). This software development was attempted. However, several technical problems have been encountered. Because of this, the procedure for calculating reaction forces on a specific suspension configuration has been provided to D. Boulanger and B. Mallette during the training session on 11 May, 1989.
- f) Know-how transfer to D. Boulanger, and B. Mallette (*).

Copy of Letter Signed By Dr. S. Sankar Re: Bombardier Contract X69

Proposed date : 30 April 1989.

Actual date : 10,11, and 17 May 1989 (J. Alanoly).

g) Application to LCNGV (Bombardier)

h) Presentation to CNRC (CONCAVE)
Date to be fixed.

i) Program GENMODEL.

As per our discussion on December 14, 1988, the proposed work in item (i) is to make an attempt to develop a graphics-based model pre-processor. This software development was initiated. However, the preliminary work performed indicates that this is a major task requiring more than 6 man-months of a software engineer. Because of this the graphics preprocessor will not be developed. However, I should point out that the suspension software is fully functional without the graphics pre-processor and the user can easily generate the input data files without any difficulty.

2. AUTHORIZATION

In reference to DG 88-195, all the proposed work have been completed and includes several additional features. We will arrange to be available at the time of CNRC's presentation at Valcourt. The original schedule proposed by James Alanoly on April 15, 1988 has been rescheduled as per DG 88-195. Because of this, our contract, which would originally have been completed by August 1989 as per the Memorandum of Agreement signed by C. Durand, dated May 13, 1987, has now been completed.

During the course of this project several reports and technical materials have been submitted and/or given to Bombardier personnel during training sessions. These constitute the interim and final reports.

Personnel authorized:

Denis Germain Bombardier Inc.

Dr. Seshadri Sankar, Ing. Concordia University

Exhibit 6 Memorandum Relating to Account L01 Revenue

MUDINASIONEM LIANISHOIL CONCAVE RESEARCH CENTRE CR-200 Department of Mechanical Engineering

TO

Ms. Audrey Williams

Director, Research Services

S-BC-216

FROM

Dr. Seshadri Sankar

Professor and Director

DATE

January 8, 1992

RE

Contribution from Bombardier: \$31,088.85

Please find enclosed a cheque for \$31,088.85 (\$29,055.27 + G.S.T. \$2,033.58) received from Bombardier Inc. for the project on "Experimental Modal Testing of EUROCHUNNEL WAGON".

Please deposit this amount into CONCAVE research account RJ-20-IC29.

Thank-you.

SS/az

c.c. Dean Swamy

j. -).) pinka.

RJ 20 IC29 52° Copies nale

Exhibit 7 Dr. T. S. Sankar Memorandum Regarding NSERC Charges

.

Ms. Donna Hum, Special Funds, Treasury A830

FROM

T.S. Sankar, Chairman, Department of Mechanical Engineering

DATE

SUBJECT: Shared costs of technical services, equipment and materials to be charged to individual operating grants as in attached authorization list - Credit Mechanical Engineering account 038-263

The different amounts authorized against the respective NSERC grants in the attached list are specific charges for technical equipment and materials and supplies (code 260) incurred by the various grant holders, their students, and their research employees. They are not transfers. In view of the instruction 95 page 42 of the NSERC Awards Guide 1983-84, please make sure, for each of the authorized charges in the list attached, that the statement entry for each account reads

xxx-260 actual amount charged research materials and supplies

All these amounts must be credited to the Departmental account 038-263 against which these charges have been incurred by the grant holders. Please contact me if you need any clarification.

The total amount to be credited to 038-263 is \$22,084.

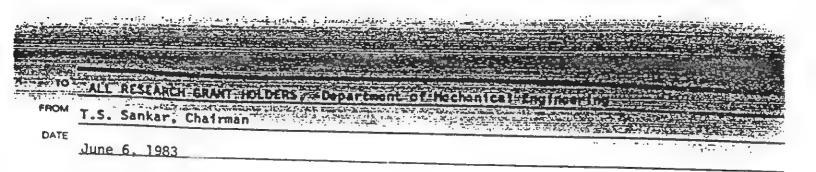
Han Kan

c6/151/1515

TSS/eh encl

cc: File account 038-263

Dr. T. S. Sankar Memorandum Regarding NSERC Charges



SUBJECT:

Authorization for the fiscal year 1983-84 (based on 1982-83 actual costs) for various departmental charges from the following individual research accounts towards shared cost of research support services provided by the Department in terms of technical services, purchase of scientific text processor system plus terminals, monitors and printer (cost: \$24,000), typing support, copier support, graduate students and laboratory computer terminals and maintenance and other facility costs, telephone service for research personnel, etc.

Exhibit 7 Dr. T. S. Sankar Memorandum Regarding NSERC Charges

		SIGNATURE
1.	. R.B. Bhat S 95	3 B90-260 Rewildett.
2.	. A.E. Blach \$ 96	8 D70-260 \ XE3(cul
3.	R.M.H. Cheng \$1,29	
4.	W.G. Habashi \$1,27	8 B25-260 W. Habashi
5.	S.V. Hoa \$ 99	2 A04-260 Little
6.	K.I. Krakow \$ 52	D52-260 blee 11
7.	T. Krepec \$ 97	B91-260 Tkym
.8	C.K. Kwok \$1,69	A 83 -260 Hanke for Kook.
9.	V. Latinovic S 93	
10.	S. Lequoc \$ 929	AD39-260 S. As ==== /811
11.	S. Lin \$1,038	A28-260 #519-
12.	G.M. McKinnon 993	
13.	H.J. McQueen \$ 968	A64 260 Hanke for McQueen
14.	R.A. Neemeh \$ 961	
15.	M.O.M. Osman \$1,636	South to the Mark of XXXX
16.	S. Sankar \$1,328	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
17.	T.S. Sankar \$1,319	A72-260 - Hankan
18.	J. Svoboda \$1,393	B5E-260 Portugui
19.	K.Thulasiraman 928	D55-260 1 1 1 1 - 1
20.	G.D. Xistris \$ 984	A40 260 Juny 1 to

Letter of Undertaking By Dr. Swamy Regarding Simulator Project



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INTERNAL MEMORANDUM

то	Cooper Langford Assoc. Vice-Rector Academic (Research)	
FROM	M.N.S. Swamy Dean of Engineering and Computer Science	
DATE	4 February 1987	

This is to confirm our telephone conversation of this morning that I, as Dean, would be responsible for an amount up to \$13,000 towards the CAE car simulator project. However, the people who are being paid should be receive the contract by the end of February, no more payments should be made on the existing code.

031-263

cc: J. Svoboda Mechanical Engineering Department

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Page 79

Exhibit 9 Memos Relating To NSERC Account Charges for Shared Data Processing Equipment

August 5, 1983

E.

Re: Purchase of Data Processing Equipment

The undersigned have agreed to transfer \$2,000 each, over a two year period, to Acct. #038-213 to cover the purchase of this equipment.

The amount to be transferred immediately and the signatures of the individuals authorizing the transfer are shown below.

The remainder is to be billed after May 31, 1984.

Name	Acct. No.	Amount	Signature
A. Soliman	M-80	\$1,000.00	atth
B. Ashtakala	D-68	1,000.00	& Astakala
A.S. Ramamurthy	A-90	2,000.00 7	A THE
M.S. Nasser	A-92	2 000.00	Millefonglan
Z.A. Zielinski	A-71	1,000.00	Till
M.S. Troitsky	· A58-606	1,000.00	morroitsky
O.A. Pekau	A94	50c.	00 Plan
A.M. Hanna	A-56	1,000.00	Messes
H.B. Poorooshasb	B68	500.00	1/12/
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Exhibit 10 Memorandum Relating to UNIDO

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Emily Raiakut -		Denise Maisonneuve	- Engineering
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laboratory supervi	sion and training fo	r Mr. Li Shinan, a sci	holar from China.
This cheque is fro	m.the United Nations	Industrial Developme	ent Organization
towards the above.	.Please deposit in	Account K-15.	
•		//	
Thank you.		UNIOD	•
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Exhibit 11 Instruction From Dr. T. S. Sankar Re: Account 038-118



INTERNAL MEMORANDUM

то

Larry Tansey, Research Accounts and Ida Gold, Trust Accounts

GM-700

FROM

T.S. Sankar, Chairman, Dept. of Mechanical Engineering

DATE

February 28, 1985

Please transfer an amount of \$23,066 from the Mechanical Engineering Account 038-118 to the general purpose grant account K56. Please make appropriate ledger entries. This transfer is being done to correct an original deposit of this amount from the Continuing Education Department in January 1985.

K56-600

Hankan

TSS/eh File 038-118 K56

Exhibit 11 Instruction From Dr. T. S. Sankar Re: Account 038-118



INTERNAL MEMORANDUM

Mr. Larry Tansey, Treasury

GM-700-12

FROM

T.S. Sankar, Chairman, Mechanical Engineering

DATE

September 16, 1986

SUBJECT: Instructions on ledger entry

I would appreciate your cooperation in the following:

- 1. Please deposit the enclosed cheque for \$178 from Canadian Liquid Air, in Mechanical Engineering Trust account 038-118. The attached invoice explains the reason for the receipt of this amount.
- 2. Please transfer \$26,725.66 from 038-118 to account K56. This money was credited to 038-118 account from Continuing education last July as final settlement of the Algerian program, and the expenses for this programme will now be met from K56.

Thank you for your cooperation.

TSS/eh encls

copy: 038-118

K56

Exhibit 12 Request By Dr. Swamy to Open Account 039-528



INTERNAL MEMORANDUM

To:

こうちゃんとうか。

Mr. D. Meadows Director of Finance

From: M.N.S. Swamy Dean of Engineering and Computer Science

Date:

II April 1988

As per our telephone conversation, I request that you open a trust account so that interest from these funds can be used for tuition scholarships for graduate students. I am enclosing the memo signed by several faculty members requesting this as well as details of the tuition scholarship. Any direct contribution from now on should receive a tax receipt for income tax purposes.

When the above account has been opened, I request that you transfer the sum of \$10,500 to it from account 638-IIS. Please advise me of the account number assigned so that I can publicize this initiative and acquire further donations to the scholarship fund.

Thank you.

enci.

OFFICE OF THE DEAN FACULTY OF ENGINEERING AND COMPUTER SCIENCE 1455 DE MAISONNEUVE BLVD WEST MONTREAL, QUEBEC H3G 1M8

Request by Faculty Members to Transfer Funds from Account 038-118

CONCORDIA UNIVERSITY



To:

さいことがなった。

Dr. M.N.S. Swamy, Dean, Faculty of Engineering &

Computer Science.

From:

Professors T.S. Sankar, R. Bhat, S. Hoa, T. Krepec,

S. Rakheja, J. Svoboda and N. Krouglicof.

Date:

November 16, 1987 (Monday)

Subject:

Dean's Graduate Tuition Scholarships.

We understand that Dr. T.S. Sankar has already proposed to you that the above fund be established to provide tuition support to deserving graduate students in our Faculty. We wholeheartedly

support this idea.

We also know that Dr. Sankar had kept separately in the trust account 038-118 the different amounts that were generated by fees for our joint efforts with him in providing specialized consultation to industries, teaching professional development continuing education courses, testing contracts etc. We also understand that Dr. Sankar has identified these amounts to you, which total apprly. \$10,500. Consequently, we wish to donate this sum as our contribution to the Dean's Graduate Tuition Scholarships as the start up funding. We are pleased to have the opportunity to support this worthy cause and we are sure that the other members of the Faculty will also contribute in the same manner.

As a final point, we would like to submit to you a suggestion for your consideration in the allotment of graduation tuition scholarships from this fund. We would be greatly pleased if preferential consideration is given to those eligible graduate students who take up their studies as a part of Concordia's present and proposed international arrangements, particularly with China and India, in order to make these international

agreements a resounding success.

Lottoa

DEPARTMENT OF MECHANICAL ENGINEERING SIR GEORGE WILLIAMS CAMPUS 1455 DE MAISONNEUVE BLVD. WEST MONTREAL, QUEBEC H3G 1M8 TEL.: 514 - 848-3131

Exhibit 14 Request by Dr. T. S. Sankar to Open Account K56

.cnal memorandum

Lynn Perkins Treasurer's Office

MC

M.N.S. Swamy
Dean of Engineering

DATE

19 March 1979



Please find enclosed a cheque in the amount of \$8625 from the Canadian Marconi Company. This amount has been given as a grant to Dr. T.S. Sankar to conduct research on 'Short-term random vibration analysis and reliability of performance of sub-miniature incandescent lamp packages'. The money will be used to support a student to work on the project and also to buy some necessary equipment. As you can see from the enclosed letter, this has been okayed by Canadian Marconi and the cheque sent to us.

Would you please open a research account in the name of Dr. T.S. Sankar and deposit the cheque in that account. Would you also please inform Dr. Sankar and me of the code assigned.

encls.

cc: Dr. T.S. Sankar, Mechanical Engineering Department

Letter From Dr. T. S. Sankar Re: \$15,000 Contribution to Chair In Hindu Studies





To:

Dean M.N.S. Swamy, Faculty of Engineering and Computer

Science.

From:

T.S. Sankar, Mech. Eng.

Date:

November 16, 1987 (Monday)

Subject: Donation to the Concordia Chair in Hindu Studies

I had discussed with you on several occasions regarding my desire to donate a part of my fees that were generated soley by my personal labour performed for certain external consulting activities. These amounts were accumulated in the account K56 within the University under my name and designated as miscellaneous funds with you as Dean having the counter signing authority. I understand that you have discussed this matter of this proposed donation with Dr. Francis Whyte, Vice Rector (Academic) and that he has agreed that I could carry out my wishes, if I so desired. Therefore, as a result of the above, I would like to release \$15,000 from my account K56 for transfer to the Concordia Chair in Hindu Studies Campaign (a cause I am deeply committed to), held by the University as a separate trust account. I request you to issue appropriate instructions to the Treasury to implement my request. I have attached a copy of a document which clearly indicates an amount of \$21,600 that resulted as the fees for my professional work done for the Continuing Education department on the 1983/84 CAE/Algerian Hence, the contribution of \$15,000 that I am making now program may be identified directly to funds generated by my consulting services to another organization. I take pride in having been able to support this important program of our University.

Malinil.

DEPARTMENT OF MECHANICAL ENGINEERING SIR GEORGE WILLIAMS CAMPUS 1455 DE MAISONNEUVE BLVD. WEST MONTREAL, OUEBEC HIGG-IM8
TEL: 514 - 848-3131

APPENDICES

Appendix A

Schedule of Vendor Files Examined

3RD CONFERENCE ON MILITARY ROBOTICS

APPLICATIONS

A. C. M.

A. E. S. DATA LTD.

A. Q. T. R. INC.

A. S. M. E.

A. U. C. C. PUBLICATIONS OFFICE

ACADEMIC PRESS INC.

AMERICAN ELECTRONICS ASSOCIATION

AMERICAN EXPRESS CANADA INC.

AMERICAN MATHEMATICAL SOCIETY

AMERICAN SOCIETY FOR ENGINEERING

EDUCATION

ARLINK INDUSTRIES

ARROW ELECTRONICS CANADA LTD.

ASSOCIATION OF CIVIL ENGINEERING

ASSOCIATION OF UNIVERSITIES & COLLEGES OF

CANADA

BANK OF AMERICA CANADA

BELL TECHNICAL SYSTEMS

BRUEL & KJAER CANADA LTD.

BUDGET RENT A CAR

BUSINESS EQUIPMENT LTD.

BUSINESSWAY COMPUTER CENTERS

C. C. E. S. '91

C. I. C. I. ENGINEERING INC.

CAIL SYSTEMS LTD.

CAMBRIDGE UNIVERSITY PRESS

CANADIAN AEROSPACE RESEARCH

CANADIAN COUNCIL OF PROFESSIONAL

ENGINEERS

CANADIAN SOCIETY FOR ELECTRICAL & COMP. ENG.

CANADIAN SOCIETY FOR MECHANICAL

ENGINEERING

CANADIAN WHO'S WHO 1991

CANSAN INC.

CENCON 4000 INC.

CENCON INC.

CENTRAL DISTRIBUTORS LTD.

CENTRAL MICROSYSTEMS

CENTER D'AFFAIRES CROWNTEK INC.

Appendix A

Schedule of Vendor Files Examined

CLEARPOINT RESEARCH CANADA INC.

COMPUTER BROKERS OF CANADA

CONSULTANTS J. V. NATHAN

COR-BIT PERIPHERIQUES INC.

D. MILNE TAILORS

DANESH ELECTRONIOUE

DAY-TIMERS OF CANADA LTD.

DELL COMPUTER CORPORATION

DELTA OFFICE EQUIPMENT INC.

DIGIDYNE INC.

DIGITAL EQUIPMENT OF CANADA LTD.

DOSH-DART IMPORT LTD.

DURHAM INSTRUMENTS

EAU-ASIS INC.

ENGINEERING & COMPUTER SCIENCE

ASSOCIATION

ER-MAN CONSULTANTS

FISHER SCIENTIFIC

FLUKE ELECTRONICS CANADA INC.

GESTETNER INC.

GRAPHICOM DESIGN LTEE.

HARVARD UNIVERSITY PRESS

HERMAN MILLER CANADA

HEWLETT PACKARD (CANADA) LTD.

HOTEL CHATEAU VERSAILLES

I E E E COMPUTER SOCIETY

IMACS

INDUSTRIES ROTALEC INC.

INTEMPCO CONTROLS LTD.

INTERFAX SYSTEMS INC.

INTERNATIONAL TRADE JOURNAL

INTERTECHNOLOGY INC.

I PASCAL INC

JOHN WILEY & SONS CANADA LTD.

K. L. M. MARKETING ET ASSOCIES

KAKI DISTRIBUTION

KEBEC CUSTOMS BROKERS LTD.

L. A. B. DIVISION MECHANICAL TECHNOLOGY INC.

LE QUATRE SAISONS

MACCONNECTION

MARONEX IMPEX INC.

MATHEMATICAL ASSOCIATION OF AMERICA

MCGRAW-HILL RYERSON LIMITED

MECHANICAL ENGINEERING PUBLICATIONS

Appendix A

Schedule of Vendor Files Examined

MECHTRONIX SYSTEMS INC.

MELLES GRIOT

META-4 COMPUTER SYSTEMS INC.

MICRO COMTUM

MICROWAY INC.

MIPC MICRO INC.

MT XINU INC.

NOVELL

OFFICE EQUIPMENT CO OF CANADA

ORDRE DES INGENIEURS DU QUEBEC

PETERSON'S

PRODOMAX INDUSTRIAL AUTOMATION LTD.

PRODUITS DUCHARME LTEE.

PUROLATOR COURIER LTD.

Q. M. S. COMPUTER PRODUCTS LTD.

R. H. NICHOLS CO. LTD.

R. L. CRAIN LTD.

RADIO SHACK

ROBERT MORRIS ASSOCIATES

ROSWELL COMPUTER BOOKS

ROYAL SOCIETY OF CANADA

S. A. E. CONCORDIA

S. A. E. INTERNATIONAL

S. G. B. CONSULTANT

S. V. ENGINEERING AND MANAGEMENT

SAGA CANADIAN MANAGEMENT

SEGUIN MACHINERY LTD.

SERVACO INC.

SESHADRI SANKAR INC.

SILICON GRAPHICS INC.

SOCIETY FOR COMPUTER SIMULATION

SONO VODEO INC.

STRU-DES INC.

STUDIO 27

SUN MICROSYSTEMS OF CANADA INC.

SUPERFLOW CORPORATION

TECHNICOM INC.

TEKTRONIX CDA INC.

TENEX DATA CORPORATION

TERABIT COMPUTER SYSTEMS INC.

THE RESEARCH AND TRAFFIC GROUP

Appendix A Schedule of Vendor Files Examined

TRAKAR PRODUCTS INC.

TRANSPORTATION ASSOCIATION OF CANADA

UNITECH COMPUTERS

UNITED NATIONS INTERNATIONAL DEVELOPMENT ORG.

UNIVERSAL INFORMATION SYSTEMS INC.

UNIVERSITY OF TORONTO PRESS

VOYAGES BEL TRAVEL

VOYAGES KELEN TRAVEL

WESTERN SCIENTIFIC SERVICES LTD.

XIOS SYSTEMS

YORK INSTRUMENTS

ZENON SYSTEMS INC.

When presented with the following irregularities, Dr. Swamy could not provide any explanation other than they were mistakes, errors in dates or embarrassing and unintentional sloppiness on his part. He emphasized that at no time did he attempt to submit false or duplicate invoices.

PAYEE: DR. SWAMY CHEOUE # 002137 \$133.89

This cheque covers five restaurant credit card receipts submitted by Dr. Swamy on a claim dated May 31, 1991.

One credit card receipt from Woodland Restaurant for \$24.00 bears no date from the restaurant and was given the date of May 21, 1991 by Dr. Swamy on his claim form.

Another credit card receipt from Taj Mahal is dated May 21, 1991 by both the restaurant's credit card plate and by Dr. Swamy on his claim. The Taj Mahal plate indicates "Calgary".

Bessner Gallay Schapira Kreisman contacted the Bank of Montreal Merchant Banking Division (the merchant bankers for the Taj Mahal according to the credit card slip) and determined from information provided by them that there is no Taj Mahal in the province of Québec. There are, however, five Taj Mahal restaurants in Canada—one each in Calgary, Edmonton, Windsor, Vancouver and Toronto.

PAYEE: DR. SWAMY

CHEOUE # 53963 \$93.00 & CHEOUE # 53534 \$420.11

Four of the five Woodland restaurant credit card receipts pertaining to these reimbursements are from a close sequence of numbers (5408549, 5408550, 5408564, 5408572). Slip # 5408550 is dated in carbon on the slip as "jun 19 1986" (cheque #53963) [scratching over 29], while the lower numbered slip # 5408549 is dated in carbon on the slip as "Jun 10, 1986" (cheque #53534). The two appear on different claim forms and are reimbursed on different cheques.

The claim forms do not specify the actual dates. Consistent with other Woodland slips, the dates printed by the restaurant's charge plate is meaningless (never changed — same date on all slips

reviewed— although dates were written onto the client copies through carbon in apparently the same handwriting as that used to enter the amounts.

Dr. Swamy's claim form indicates that he was in Sherbrooke on two round trips on the 9th and 10th of June, 1986. Dr. Swamy submitted per diem claims for both these days, and also claimed the Woodland expense for the 10th, which is on Guy Street, in Montreal.

Re: June 9, 1986, see also cheque # 52863 reimbursing a stub at Le Taj for the same day.

PAYEE: DR. SWAMY CHEOUE # 52863 \$97.85

This claim is supported by the restaurant stub from Le Taj and states the same date, June 9, 1986, as the above claim on cheque #53534. No other back up exists for this stub.

PAYEE: DR. SWAMY

CHEQUE # 51659 \$451.76

This claim includes a credit card slip from Restaurant Le Taj in the amount of \$173.55. The charge plate date is April 4, 89 as well as the handwritten date on the slip. (See cheque # 68240 below)

On the same claim, Dr. Swamy claimed a stub from Chichi's (\$31.85). On cheque # 68240 below, Dr. Swamy also claimed \$31.85 plus a \$4.00 tip for Chichi's relating to the same day, supported by a credit card slip.

Dr. Swamy claimed \$96.25 on a stub from Katsura. No other back up exists. This stub is dated April 3, 1989, the same date as the credit card slip from Chenets #5087260 included in this claim (\$88.08).

Payee: Dr. M.N.S. Swamy Cheque #: 68240 - \$246,25 Cheque Date: July 12, 1989

Dr. M.N.S. Swamy submitted a travel expense claim dated April 4, 1989 that included, as support for an item listed on the claim, a stub from Chichi's Restaurant in the amount of \$31.85. The date on the stub is also "23.3".

On June 29, 1989 Dr. M.N.S. Swamy submitted another expense claim containing two original credit card receipts supporting a luncheon on June 16, 1989. However, the dates on the credit

card plate indicates "032489". On both of these credit card receipts, the date of "06/16/89" is written on the receipt in a different pen and in what appears to be different handwriting from the balance of the receipt. One of these receipts, from the same restaurant - Chichi's - is for \$35.85, the amount before the tip is \$31.85, the same amount as on the stub described above.

Included in this claim is a credit card slip from Piazziolle (#5759108) with a charge plate date of Apr 4, 89. The slip has a date of June 6, 1989 entered in ink in what appears to be different handwriting from the rest of the slip. This is the same date as the Le Taj receipt reimbursed on cheque #51659. In addition, another Le Taj receipt (#5317282-\$83.47) included in this claim, bears a charge plate date of Jun 15, 89 but the customer's copy of the receipt has a date written in what appears to be different handwriting from the rest of the slip, indicating a date of June 22, 89.

PAYEE: DR. SWAMY CHEOUE # 006523-\$52.78 & CHEOUE # 005569-\$52.78 & CHEOUE # 072594-\$1,372.33

Dr. Swamy received payment for the same expense for his trip to India in June 1991 twice, i.e. two cheques of \$52.78.

Dr. Swamy claimed reimbursement for a Yogi restaurant (\$52.00) on Dec 5, 1992, according to his claim form. On this date Dr. Swamy was in Chicago according to airline tickets and dates listed by Dr. Swamy on another claim form.

Pavee. Dr. M.N.S. Swarny Cheque # 072594 - \$1,372.33 Cheque Date: January 21, 1993

The expense report from Dr. M.N.S. Swamy is for travel to Chicago from December 4 - 6, 1992 and is supported by a hotel invoice and an airline ticket confirming the dates.

On a separate expense report summary, reimbursed by the same cheque, Dr. M.N.S. Swamy claimed that on December 5, 1992, he had lunch at a restaurant in Montreal, supported by an original credit card receipt (\$52.00)

When presented with the following irregularities, Dr. S. Sankar provided the following explanations:

- He does not remember the details surrounding the expense
- The duplicate submissions must result from "honest mistakes"
- Expenses on the same date must result from "an error in dates by his secretary"

PAYEE: Dr. S. Sankar CHEOUE # 69619 \$648.90

In 1987, Dr. S. Sankar submitted a claim for the purchase of shock absorbers (price does not appear to include installation) with a notation on the supplier invoice as being "for testing."

The invoice was from 1985, and a memo to the file from treasury indicates that the claim is "ineligible." The claim was paid.

Dr. S. Sankar was also reimbursed on the same cheque for a claim relating to April 85 travel to the DND in Alberta, and June 86 and Aug 86 travel to Ottawa.

As with the above shock absorber claim, these items were claimed between 9 and 23 months after the expenses were allegedly incurred. Again, as with the shock absorber claim, Treasury issued a memo to Dr. S. Sankar disputing (part of) the claim, this time questioning the dates claimed versus the dates on the receipts. Dr. S. Sankar responded, in writing on the reverse of the memo that he "could not remember all the details of the trip," and the expenses were subsequently reimbursed to him.

An examination of the supporting stubs, hotel invoice, and credit card receipts indicates that the Chimo hotel bill is dated July 22, 1987, with an Ottawa address, although Dr. S. Sankar's claim form indicates he was in Ottawa in the immediately preceding and following months.

PAYEE: Dr. S. SANKAR CHEOUE # 69083 \$805.03

Supporting a claim dated March 2, 1987 is a restaurant stub from Chimo Inn Restaurant for an even amount of \$45.00, dated Feb 23, 87. Included with another claim form dated March 12, 1987 is a credit card receipt also dated Feb 23, 1987 and for Chimo Inn Restaurant in the amount of \$40.37.

The claim dated March 12, 87 is supported by an additional Chimo Inn restaurant receipt of \$15.92. This receipt is dated March 1st, 1987 although the claim form submitted by Dr. S. Sankar indicates he only travelled to Ottawa on the following day.

The March 2, 1987 claim includes a Pizza Hut receipt of \$11.61 dated Nov 23rd. Given the exclusive use of English and a tax rate of 6% (66 cents tax on a pretax expense of \$10.95), the restaurant cannot be in Quebec, Ontario or Alberta. There is no explanation of where this receipt is from and a review of other expense reports for Dr. Sankar does not indicate any out-of-town travel on or about Nov. 23, 1986.

Pavee: Dr. S. Sankar

Cheque #: 101213 - \$615.71 Cheque Date: June 30, 1990

Cheque #: 45203 - \$775.10 Cheque Date: March 6, 1989

Dr. S. Sankar submitted an original credit card receipt from Katsura Restaurant in Montreal, which supported an accompanying expense report summary, both of which indicated a date of "09/11/88."

Previous to the above, Dr. S. Sankar had submitted a travel expense claim, supported by a stub from the Katsura Restaurant. The stub was in the same amount (\$77.68) as the above-noted credit card receipt. The stub bore the date of "09/11/88." No date was noted on the latter expense claim

Dr. S. Sankar submitted a travel expense claim dated December 9, 1988 for a trip to Kingston, Ontario, indicating the dates of travel as November 24 and 25, 1988. This claim was supported by a hotel invoice and a guest receipt stub, confirming the dates of travel. This claim also included a claim for automobile expense based upon 624 km. @ \$.20 (\$124.80).

On a second travel expense claim dated December 9, 1988, from Dr S. Sankar, which was reimbursed on the same cheque as the above-noted claim, Dr. S. Sankar claimed expenses relating to trips to C.R.I.Q. (Center de Recherche Industrielle du Quebec) which is located at 8475 Christophe Colombe, Montreal, and to John Abbott C.E.G.E.P. also on November 24, 1988.

Pavee: Dr. S. Sankar

<u>Cheque #: 99800 - \$1,145,76</u> <u>Cheque Date: December 12, 1993</u>

Cheque # 98526 - \$34.95

Cheque Date: November 25, 1993

On the expense report summary supporting cheque #99800, Dr. S. Sankar claims reimbursement for a trip to Detroit, Michigan from October 30, to November 3, 1993. This claim is supported by an airplane ticket confirming the dates of travel.

On the expense report supporting cheque #98526, Dr. S. Sankar claims that on November 2, 1993, he had lunch with a third party at a Montreal restaurant.

When Dr. T. S. Sankar was presented with the following facts which we had uncovered during our investigation. Initially his response was that he did not remember the trips. After some deliberation on his part, he admitted to the following:

- N. Ramani is his sister-in-law from India
- She did not travel to Indiana on University business
- Ramani Sankar is his brother from India
- He did not travel to Washington or Orlando on University business
- Dr. T. S. Sankar conceded that the expenses were improperly submitted and represent "an error in judgement"

PAYEE: KELEN TRAVEL
RE: Dr. T. S. Sankar
CHEOUE # 63760 \$7,868.29

- Dr. T. S. Sankar submitted a travel expense claim supporting an airplane ticket for someone listed on the claim as a "lecture visit to Concordia...Visit to Indiana University, Bloomington, Indiana" for N. Ramani The airplane ticket was purchased through Kelen Travel. The ticket, which was not submitted with the receipt from Kelen, and which is not on file, apparently was for return airfare to Bloomington, Indiana.
- Dr. T. S. Sankar's claim form states "she [Ramani] gave a few lectures, and Dr. T. S. Sankar agreed to pay the travel from Montreal to Indiana." There was no other evidence found of any other expenses related to this trip to Indiana.

Bessner Gallay Schapira Kreisman phoned Indiana University and spoke to the Vice Chancellor of Budgeting and his administrative assistant. We enquired of each as follows:

What expenses, if any, would Indiana University customarily pay for an outside lecturer, and what records of these payments would remain?

We also requested that the administrative assistant ask their Engineering Faculty to determine if anyone remembered Ramani.

The administrative assistant stated that it is the University's policy to pay travel and accommodation for visiting lecturers, but Indiana University has no record of any such payments

being made. Further, no one in Engineering could remember a Ms. N. Ramani being present at the University at the time of the alleged visit, November, 1989. (See Letter - Page 101)

Concordia's payroll department has no records of N. Ramani.

Bessner Gallay Schapira Kreisman requested a copy of the ticket from Kelen travel. Kelen responded that the ticket was likely used for travel since it had not been refunded within a year of issue. Otherwise, Kelen was unable to provide additional information.

Concordia's Human Resources office was questioned about N. Ramani as it is the job of the office to assist all foreign faculty with any customs and immigration matters. We were advised that the Human Resources office does not normally retain records beyond two years. We were advised by Anita Grant of that office that she personally had no recollection of anyone named "Ramani," but she said that her supervisor thought that the name and the approximate date, November, 1989, sounded familiar.

On the same claim form, Dr. T. S. Sankar also claimed air fare for Ramani to fly to New York. The claim states that Ramani "is originally from New York."

We then discovered cheque #51842 in the amount of \$251.05, dated June 9, 1986 payable to "Ramani Sankar," at 8000 Nantes, Brossard, Quebec, which is the residence of Dr. T. S. Sankar. The expense claim is for airfare — Montreal-Washington (3 days)-Orlando(4 days)-Montreal— "for trip to Montreal and return to visit CBS & give a seminar on building design in India". It should be noted that the flight schedule originates & terminates in Montreal.

Concordia's payroll department had no files pertaining to Ramani Sankar.

INDIANA UNIVERSITY PURDUE UNIVERSITY INDIANAPOLIS

February 15, 1994

VICE CHANCELLOR FOR BUDGETING AND FISCAL AFFAIRS



Jeffrey Weigensberg Bessner Gallay 5250 Ferrier Suite 812 Montreal, Quebec Canada H4M1Y7

Dear Mr. Weigensberg,

As a follow up to our conversation I have spoken to the fiscal officer of our School of Engineering and Technology and also the Director of Accounting Records and Services. They have been unable to locate any record of a N. Ramani being here on this campus during November 1989.

If I can be of further service please let me know.

Best regards,

Jackie J. Cloe

Administrative Assistant

Administrative Building 122 355 North Lansing Street Indianapolis, Indiana 46202-2896

Appendix C Analysis of Account 038-118 Dr. T. S. Sankar Continuing Education Courses — 1982-1993

Revenue Source	Credit Amount	Debit Amount
Balance Forward from 1981 Amounts under \$3000	4,959 20,009	30,893
CAE Project Continuing Education & Mechanical Engineering - In 3 installments (2 @ 23,000 & 1 @ 23,066)	69,066	
Transfer to Account K56 (T.S. Sankar Mechanical Engineering Miscellaneous)		23,066
Computer charges to account X42 (Department of Supply & Services Contract - Dr. Bhat) Payroll charges	14,300	60,550
Purchases form CAMO (no information available supporting this purchase)		3,500
Transfer from Continuing Education in 3 equal installments	80,177	
Transfer to Account K56 Re: Algerian Program (T.S. Sankar Mechanical Engineering Miscellaneous)		26,725
Transfer To K55 Final Settlement (Dean Swamy - Mechanical Engineering Special Account)		3,000
Purchases form CAMO (no information available supporting this purchase)		4,925
Payment to Auto-Trol Technology (no information available supporting this purchase) Fees to Dr. Kwok		10,000 2,500
Transfer to 039-528 (Dean's Graduate Tuition Scholarships		•
account opened in 1988 with this transfer) Unspent Balance - May 31, 1993	-	10,500 12,852

Appendix D Schedule of Payments to Seshadri Sankar Inc. or Seshadri Sankar

INVOICE FOR CONSULTING SERVICES or CHEQUE **HONORARIUM** NUMBER OF INVOICE ACCOUNT NUMBER DATE TAUOMA FROM TO DAYS DATE CHARGED Payroli 6-Nov-87 4,500 Apr-87 Jun-87 9 **X-6**9 10545 25-Jan-88 9,500 Jul-87 Sep-87 19 7-Jan-88 X-69 17564 2-May-88 4,500 Oct-87 Dec-87 9 7-Jan-88 X-69 1987 18,500 37 22763 18-Jul-88 5,350 Jan-88 **Mar-88** 10 8-Apr-88 X-69 29643 31-Oct-88 11,000 Apr-88 Jun-88 20 5-Jul-88 X-69 36352 6-Feb-89 11,000 Oct-88 Sep-88 20 18-Oct-18 X-09 1117 10-May-89 3,850 Oct-88 Dec-88 7 20-Feb-89 X-09 1988 31,200 57 Payroll 6-Oct-89 6,800 Jan-89 Mar-89 11 1-May-89 X-69 1811 25-Sep-89 16,200 Apr-89 Aug-89 27 15-Sep-90 X-69 57714 2-Feb-90 3,650 Oct-89 Oct-89 10 8-Feb-90 X-09 57714 2-Feb-90 7,301 **Nov-89** Dec-89 10 8-Feb-90 X-09 1989 33,951 58 14139 24-Apr-90 2,949 Jan-90 Jan-90 8 8-Feb-90 X-09 61709 14-May-90 2,304 Feb-90 Feb-90 7 22-Mar-90 X-09 61709 14-May-90 2,048 Feb-90 Feb-90 22-Mar-90 X-09 79411 27-May-91 2,485 Apr-90 Oct-90 7 22-Mar-91 X-09 29-Apr-91 3,600 Apr-90 Dec-90 10 29-Apr-91 X-10 79411 27-May-91 1,243 Nov-90 Nov-90 4 22-Mar-91 X-09 1990 14,628 42 13062 4,622 29-Oct-91 Jan-91 Mar-91 12 27-Mar-91 X-10 Payroll 18-Oct-91 1,800 **Apr-91** Apr-91 5 10-Sep-91 X-10 Payroll 1,243 22-Mar-91 XF-02 Payroli 17-Apr-92 7,200 May-91 **May 91** 20 20-Sep 91 X-10 Payroll ~Oct 93 1,800 Nov-91 Dec-91 5 22-Mar-92 X-10 1991 16,665 46 114,944

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Financial and Administrative Use of Grant Funds.

184. NSERC receives its funding through parliamentary appropriations. It has a responsibility, therefore, not only to Parliament, but to the Canadian people, to ensure that the public funds put in its trust are managed to the best of its ability.

To this end, grant funds must be used effectively, economically and in the best interest of the research supported by the grant. The conditions governing the use of these funds are intended to ensure sound financial and administrative practices.

The administration of NSERC grants is carried out by three parties: The grantee, the university and NSERC.

The grantee authorizes expenditures in accordance with NSERC regulations (outlined in the Awards Guide or imposed as a condition of a grant) and with university policies.

The university administers the grant funds and establishes appropriate policies, controls and systems to ensure that NSERC policies and regulations are followed.

NSERC defines the conditions under which grant funds may be used, monitors the use of grant funds, and interprets its rules and regulations for the university and grantees.

This chapter describes the financial administration of grant funds and outlines the regulations governing their use. Grantees who wish to use funds in a manner not covered by explicit NSERC guidelines or regulations must consult their research grants officer or business officer prior to doing so. If there is no explicit NSERC guideline or regulation to answer a question, the university policy applies; if there is no university policy covering the subject, the research grants or business officer will seek an appropriate ruling from NSERC. Since it is not feasible to regulate every possible transaction using NSERC grant funds, the grantees are responsible, ultimately, for ensuring that judgement is exercised at all times.

Authorization of Expenditures from Grant Accounts

188. Recipients of NSERC grants are responsible for decisions regarding the use of their funds, subject to NSERC policy and the regulations contained in this Guide and all relevant university policies. Expenditures made against a grant must be authorized by the grantee who certifies that these expenditures are essential to carry out the research supported by the grant. No other person may initiate or authorize expenditures from an NSERC grant account without the grantee's delegated authority (see paragraphs 214 and 215).

Conflict of Interest

189. A grantee or co-investigator must not have any financial or personal interest, either direct or indirect, in any of the transactions chargeable against NSERC grants. A grantee in doubt as to possible conflict of interest must contact the research grants officer at the university and abide by university policy. If there is no university policy or regulation on this matter, the research grants officer will consult NSERC for an appropriate ruling.

Common Research Expenses

190. Although grantees are encouraged to use their grants to share common research expenses, these should be apportioned on the basis of the benefit or use obtained. Grant funds must be used for the benefit of the grantee's own research program, and grantees must not be required to contribute to "pooled" expenses from which they obtain no benefit Grant funds must not be transferred from one research to another or to non-NSERC accounts.

Failure to Follow Regulations

193. Failure to comply with the regulations outlined in this Guide can result in the freezing or closing of the grant account(s) of an individual researcher or of all grants in the NSERC common grant account at the university. Grant funds used to pay expenditures contrary to NSERC policy will have to be returned to the grant account or to NSERC.

Grantees who demonstrate a blatant disregard for the regulations outlined in the Awards Guide, university policies, or the principles of sound financial management, risk losing NSERC funding.

If a university has evidence that NSERC funds have been used in a fraudulent manner, NSERC must be advised without delay. If NSERC finds that its funds have been used in a fraudulent manner, either through a university report or through its regular monitoring of grantees' expenditures, the matter will be referred to the appropriate legal authorities.

Ineligible Expenses

The following paragraphs are not all inclusive (other ineligible expenditures are noted in bold in paragraphs 197 to 205).

Indirect of Overhead Costs

207. The funds provided through NSERC in aid of research must not be used to contribute to the payment of indirect or overhead costs or research. The following are given as examples of what NSERC considers to be such costs:

- basic facilities, including utilities such as heat, light and water;
- salaries of secretarial and administrative support personnel;
- purchase, repair or maintenance of office furniture, equipment and supplies;

- telephone installation or monthly rental;
- building renovations or expansion;
- insurance.

The above is not an all-inclusive list. Grantees who are in doubt as to whether an expense is direct or not must consult with the business officer and/or research grant officer of the university for a ruling.

Termination of Grants and Closing of Accounts.

Unspent Balances

215. All NSERC grants paid to the university common grant account (see paragraph 187) are deemed to have a primary holder, the grantee named on the award notice, and a secondary holder who is the president of the university that administers the grant. As per paragraph 195, only the grantee may initiate or authorize the expenditure of funds until the date of termination of the grant (see paragraph 214).

NSERC grants which have not been renewed or extended, or which have had to be terminated as a result of circumstances described in paragraph 214 may contain unspent balances at termination. These unspent balances may be comprised of funds which had been allocated in prior fiscal years and/or funds issued in the current fiscal year.

Since April 1, 1992, NSERC's policy has been to allow unspent funds from prior years to be retained by the university, under certain conditions

determined by NSERC's Financial Services Division: these funds may then be transferred to a Special General Research Grant account. Funds in this account will be controlled by the university president and must be used for commitments outstanding at the closing of individual NSERC grant accounts and for the broad purpose of enhancing the quality of research in the natural sciences and engineering.

For unspent funds issued in the current fiscal years, NSERC will issue a revised Notification of Decision (NOD). Unless specifically requested by NSERC's Financial Services Division, no refunds of current year grants will be made to NSERC. Adjustments relating to the reduced grant account on the NOD will be made by NSFRC in the next instalment payment to the university's Common Grant Account.

Appendix F

Extracts From The Contract Research Handbook of Concordia University

(Sept 1, 1989; Revised Oct/92)

- "No direct or indirect reimbursement to the Principal Investigator for grants." (Page 2)
- "It should be noted that provision of operating funds to universities are to support the academic endeavors of the university; diversion of these funds to subsidize research for a private corporation would be an inappropriate use of operating funds." (Page 2)
- Such activity (i e Contract research) must be financially self supporting since the University cannot subsidize contract research within the general operating and capital funds provided from the public purse for its primary mission" (Page 3)
- "The contract revenue is University revenue in return for
 University services rendered to the outside party to the contract.

 The contract must ensure that the University will recover all direct and indirect costs associated with the execution of the work Overhead revenue represents a recovery of indirect costs and hence constitutes general University revenue." (Page 5)
- "It is essential to note that Section 9 represents an estimate of total University cost, and hence of charges to the outside party, for the prosecution of the project; it does not constitute the Expenditure Budget to be assigned to the Principal Investigator

Appendix F

Extracts From The Contract Research Handbook of Concordia University (Sept 1, 1989; Revised Oct/92)

for the project in the event that the contract is awarded to the University." (Page 6)

- "If the contract will be carried out entirely as a part of the regular work load of the employees concerned, then no additional income will be permitted and so the Expenditure Budget will not include funds for the time spent in carrying out the work."

 (Page 6)
- "A full-time faculty member shall not receive payment for more than 52 days work in any academic year (June 1-May 31)" (Page 7)
- The Principal Investigator should indicate the name of the individual, the salary rate they are to be paid and the unit of time" (Page 13)
- "If students are employed on the project, the number of student hours should be noted as well as the nature of the work they will be undertaking." (Page 13)